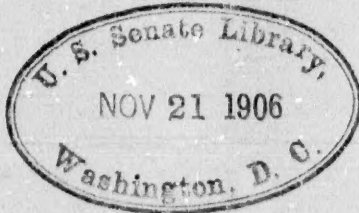


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59TH CONGRESS : : 1ST SESSION

DECEMBER 4, 1905-JUNE 30, 1906

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CONTENTS

No.

127, pt. 1. Report of Isthmian Canal Commission, Dec. 1, 1905.

127, pt. 2. Isthmian canal, reply to charges against Isthmian Canal Commission.

429. Report of Special Panama Railroad Commissioner.

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59TH CONGRESS,
1st Session.

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No. 127.

ANNUAL REPORT

OF THE

ISTHMIAN CANAL COMMISSION

FOR THE

YEAR ENDING DECEMBER 1, 1905.

JANUARY 8, 1906.—Read, referred to the Committee on Inter-oceanic Canals,
and ordered to be printed.

WASHINGTON:
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To the Senate and House of Representatives:

I inclose herewith the annual report of the Isthmian Canal Commission, the annual report of the Panama Railroad Company, and the Secretary of War's letter transmitting the same, together with certain papers.

The work on the Isthmus is being admirably done, and great progress has been made, especially during the last nine months. The plant is being made ready and the organization perfected. The first work to be done was the work of sanitation, the necessary preliminary to the work of actual construction; and this has been pushed forward with the utmost energy and means. In a short while I shall lay before you the recommendations of the Commission and of the board of consulting engineers as to the proper plan to be adopted for the canal itself, together with my own recommendations thereon. All the work so far has been done not only with the utmost expedition, but in the most careful and thorough manner; and what has been accomplished gives us good reason to believe that the canal will be dug in a shorter time than had been anticipated and at an expenditure within the estimated amount.

All our citizens have a right to congratulate themselves upon the high standard of efficiency and integrity which has been hitherto maintained by the representatives of the Government in doing this great work. If this high standard of efficiency and integrity can be maintained in the future at the same level which it has now reached, the construction of the Panama Canal will be one of the feats to which the people of this Republic will look back with the highest pride.

From time to time various publications have been made, and from time to time in the future various similar publications doubtless will be made, purporting to give an account of jobbery, or immorality, or inefficiency, or misery as obtaining on the Isthmus. I have carefully examined into each of these accusations which seemed worthy of attention. In every instance the accusations have proved to be without foundation in any shape or form. They spring from several sources. Sometimes they take the shape of statements by irresponsible investigators of a sensational habit of mind, incapable of observing or repeating with accuracy what they see and desirous of obtaining notoriety by widespread slander. More often they originate with, or are given currency by, individuals with a personal grievance.

The sensation mongers, both those who stay at home and those who visit the Isthmus, may ground their accusations on false statements by some engineer, who having applied for service on the Commission and been refused such service, now endeavors to discredit his successful competitors, or by some lessee or owner of real estate who has sought action or inaction by the Commission to increase the value of his lots, and is bitter because the Commission can not be used for such purposes; or on the tales of disappointed bidders for contracts, or of officeholders who have proved incompetent or who have been suspected of corruption and dismissed, or who have been overcome by panic and have fled from the Isthmus. Every

specific charge relating to jobbery, to immorality, or to inefficiency, from whatever source it has come, has been immediately investigated, and in no single instance have the statements of these sensation mongers and the interested complainants behind them proved true. The only discredit inhering in these false accusations is to those who originate and give them currency, and who, to the extent of their abilities, thereby hamper and obstruct the completion of the great work in which both the honor and the interest of America are so deeply involved. It matters not whether those guilty of these false accusations utter them in mere wanton recklessness and folly or in a spirit of sinister malice to gratify some personal or political grudge.

Any attempt to cut down the salaries of the officials of the Isthmian Commission, or of their subordinates who are doing important work, would be ruinous from the standpoint of accomplishing the work effectively. To quote the words of one of the best observers on the Isthmus, "Demoralization of the service is certain if the reward for successful endeavor is a reduction of pay." We are undertaking in Panama a gigantic task—the largest piece of engineering ever done. The employment of the men engaged thereon is only temporary, and yet it will require the highest order of ability if it is to be done economically, honestly, and efficiently. To attempt to secure men to do this work on insufficient salaries would amount to putting a premium upon inefficiency and corruption. Men fit for the work will not undertake it unless they are well paid. In the end the men who do undertake it will be left to seek other employment with as their chief reward the reputations they achieve. Their work is infinitely more difficult than any private work, both because of the peculiar conditions of the tropical land in which it is laid and because it is impossible to free them from the peculiar limitations inseparably connected with Government employment; while it is unfortunately true that men engaged on public work, no matter how devoted and disinterested their services, must expect to be made the objects of misrepresentation and attack. At best, therefore, the positions are not attractive in proportion to their importance; and among the men fit to do the task only those with a genuine sense of public spirit and eager to do the great work for the work's sake can be obtained, and such men can not be kept if they are to be treated with niggardliness and parsimony, in addition to the certainty that false accusations will continually be brought against them.

I repeat that the work on the Isthmus has been done and is being done admirably. The organization is good. The mistakes are extraordinarily few, and these few have been of practically no consequence. The zeal, intelligence, and efficient public service of the Isthmian Commission and its subordinates have been noteworthy. I court the fullest, most exhaustive, and most searching investigation of any act of theirs, and if any one of them is ever shown to have done wrong his punishment shall be exemplary. But I ask that they be decently paid, and that their hands be upheld as long as they act decently. On any other conditions we shall not be able to get men of the right type to do the work; and this means that on any other condition we shall insure, if not failure, at least delay, scandal, and inefficiency in the task of digging the giant canal.

THEODORE ROOSEVELT.

THE WHITE HOUSE, January 8, 1906.

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TABLE OF CONTENTS.

	Page
Introduction.....	1
Changes in organization of Commission.....	5
Preparatory work.....	6
Health and sanitation.....	6
Care of employees.....	7
Recreation for employees.....	8
Personnel.....	9
Unskilled labor.....	9
Employment and transportation.....	10
Engineering work of the year.....	12
Materials and supplies.....	15
Purchases for plant and preliminary work.....	16
Purchase of ships.....	17
Telegraph and cable communications.....	18
The Panama Railroad.....	18
Monetary system.....	20
Auditing and accounting of funds.....	20
Finances.....	21

EXHIBIT A.

Annual report of the governor of the Canal Zone.....	28
(For Table of Contents see p. 27.)	

EXHIBIT B.

Report of the chief engineer.....	108
Introduction.....	108
Branch of labor and quarters.....	109
Division of municipal engineering.....	110
Sewers.....	111
Roads.....	111
Paving.....	112
Division of building construction.....	112
Mechanical division.....	113
Colon division.....	114
La Boca division.....	115
Chagres River surveys.....	116
Division of map making and lithography.....	116
Division of meteorology and river hydraulics.....	116
Culebra division.....	117
The Panama Railroad.....	121

EXHIBIT C.

Résumé by Chief Engineer Stevens of conditions on Isthmus July 1, 1905.....	124
Introduction.....	124
Colon construction division.....	125
Chagres division.....	125
Gamboua division.....	125
Culebra division.....	125
La Boca division.....	126
Bureau of personnel, transportation, and quarters.....	126

Résumé by Chief Engineer Stevens, etc.—Continued.		Page.
Bureau of supplies.....		126
Bureau of waterworks, sewers, and roads		127
Bureau of machinery and equipment		129
Bureau of architecture and building		130
Bureau of meteorology and river hydraulics.....		130
Bureau of map making, lithography, and printing		131
Bureau of communication.....		131
Sheet A.—Statement of net approximate cost of work for year ending June 30, 1905.....		131
Sheet B.—Arbitrary charges to cover cost of investment in plant for year ending June 30, 1905		132
Sheet C.—Statement showing steam shovels at work by months, February 1 to July 1, 1905.....		132
Sheet D.—Relative efficiency of steam shovels as shown by amount of material excavated, February 1 to July 1, 1905.....		132

EXHIBIT D.

Reports by General Hains and Major Harrod and by Colonel Ernst on conditions on the Isthmus, July 1, 1905.....	133
Introduction of General Hains's and Major Harrod's reports	133
Work on Culebra division	134
Colon construction division	134
Bureau of waterworks, sewers, and roads	135
Bureau of architecture and building	135
Bureau of machinery and equipment	135
Letter from Mr. W. E. Dauchy, acting chief engineer, as to condition of work	136
Introduction of Colonel Ernst's report.....	139
Organization	140
Work accomplished	141
Buildings and grounds.....	141
Machinery and equipment.....	141
Waterworks, sewers, and roads.....	142
Wharves	143
Canal excavation.....	143
Surveys	144
Food supplies	144
Force employed.....	145
Panama Railroad.....	145
Circular No. 13.—Organization of department of construction and engineering, effective June 1, 1905.....	146

EXHIBIT E.

Organization of the Washington office	148
---	-----

EXHIBIT F.

Organization of the department of construction and engineering, September 1, 1905.....	151
--	-----

EXHIBIT G.

General condition of employment in which salary is fixed in United States currency.....	157
---	-----

EXHIBIT H.

Regulations governing purchase, delivery, etc., of materials and supplies.....	159
Purchases.....	159
Delivery of supplies	160
Assistant purchasing agent on Isthmus.....	160
Assistant purchasing and forwarding agents in the United States.....	161
Custody and issue of material and supplies	181

TABLE OF CONTENTS.

VII

Page.	Regulations governing purchase, delivery, etc.—Continued.	Page.
126	Requisitions made on material and supplies division	163
127	Articles manufactured	163
129	Scrap material	164
130	Record of material and supplies	164
130	Property records	165
131	Storekeepers	165
131	Inventories by storekeepers	166
131	Requisitions for materials and supplies to be purchased	167
131	Inspection	168
132	Board of survey	169
132	Sales	170

EXHIBIT I.

Form of proposal for bids	171
---------------------------------	-----

EXHIBIT J.

Auditing organization	179
Auditing organization of the Isthmian Canal Commission, Canal Zone, and Panama Railroad	179
Bureau of material and supplies	180
Timekeeping bureaus	180
Duplicate accounts	180

EXHIBIT K.

Detailed statement of expenditures to June 30, 1905, by departments	181
General and department of administration	181
Department of government and sanitation	182
Department of construction and engineering	184
Summary of expenditures in all departments	186

EXHIBIT L.

Detailed statement of expenditures July 1 to September 30, 1905, by departments	187
General and department of administration	187
Department of government and sanitation	188
Department of construction and engineering	191

EXHIBIT M.

Consolidated statement of expenditures to September 30, 1905	193
--	-----

EXHIBIT N.

Statement of miscellaneous receipts from all sources	194
--	-----

EXHIBIT O.

Laws passed by preceding commission subsequent to last annual report	195
--	-----

EXHIBIT P.

Orders issued by preceding commission subsequent to last annual report	202
--	-----

EXHIBIT Q.

Resolutions of the preceding commission subsequent to last annual report ...	214
--	-----

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ANNUAL REPORT
OF THE
ISTHMIAN CANAL COMMISSION
FOR THE
YEAR ENDING DECEMBER 1, 1905.

OFFICE OF THE ISTHMIAN CANAL COMMISSION,

Washington, D. C., Dec. 6, 1905.

SIR: The Isthmian Canal Commission has the honor to submit its annual report for the year ending December 1, 1905.

INTRODUCTION.

The present Isthmian Canal Commission assumed office on April 3, 1905. The preceding Commission rendered its last report on December 1, 1904. The last report of the chief engineer was rendered on February 1, 1905.

There is appended hereto, marked Exhibits O, P, and Q, respectively, all laws, orders, and resolutions promulgated by the preceding Commission subsequent to the date of its last report and up to the date on which the present Commission assumed office.

There is also appended hereto, marked "Exhibit C," a résumé, prepared by the present chief engineer, of the conditions in the different divisions and bureaus in the department of construction and engineering, and a general outline of their duties and the work performed by them during the period from February 1, 1905, when the former chief engineer made his last report, and June 30, 1905, when his term of office expired, he having rendered no report at the time of his separation from the service.

It should be borne in mind, in justice to the present chief engineer, that he was called upon to prepare a report to cover an interregnum, in the making of which report he could only give the views extracted from reports and records on file in his office and from subordinate officials.

ANNUAL REPORT.

The Isthmian Canal Commission as at present constituted was organized and is acting under the following Executive orders of the President and of the Secretary of War, dated April 1 and April 3, 1905, respectively:

WASHINGTON, D. C., April 3, 1905.

The following order of the President of the United States of April 1, 1905, the letter of the Secretary of War addressed to the President under date of March 30, 1905, the order of the Secretary of War of April 3, 1905, and the resolution of the Commission adopted April 3, 1905, in pursuance of the order of the President, are hereby published for the information of all concerned.

WHITE HOUSE,

Washington, D. C., April 1, 1905.

The practical result of the operations of the Isthmian Canal Commission appointed and acting under previous executive orders has not been satisfactory, and requires a change in the personnel of the Commission and in the instructions for its guidance.

The Commission will hold quarterly sessions the 1st of January, April, July, and October of each year at the office of the governor on the Isthmus of Panama, and will continue each session as long as public business may require. Further notice of such meetings shall not be necessary to their regularity. The Commission may hold special sessions at the call of the chairman. Four members shall constitute a quorum, and the action of such majority shall be the action of the Commission.

The Commission, under the supervision and direction of the Secretary of War, and subject to the approval of the President, is charged with the general duty of the adoption of plans for the construction and maintenance of the canal and with the execution of the work of the same; with the purchase and delivery of supplies, machinery, and necessary plant; the employment of the necessary officers, employees, and laborers, and with the fixing of their salaries and wages; with the commercial operation of the Panama Railroad Company and its steamship lines as common carriers; with the utilization of the railroad as a means of constructing the canal; with the making of contracts for construction and excavation, and with all other matters incident and necessary to the building of a waterway across the Isthmus of Panama, as provided by the act of Congress of June 28, 1902.

For convenience and to secure the uninterrupted course of the work, an executive committee of not less than five members of the Commission shall be appointed by the Commission to act in place of the Commission during the intervals between the meetings of the Commission, and to report its doings in full to the Commission at the next regular meeting. A minute of every transaction of the executive committee shall be made, and one copy of the minutes shall be forwarded to the Secretary of War and another copy transmitted for the consideration of the Commission at its next meeting. Regular meetings of the executive committee shall be held at the office of the governor on the Isthmus of Panama at 10 o'clock in the forenoon on each Monday and Wednesday of every week, and further notice of such meetings shall not be necessary to their legality. A majority of their number shall constitute a quorum for the transaction of business at such meetings. The action of such majority shall be the action of the executive committee.

For convenience of executing the work to be done there shall be constituted three executive departments.

(a) The head of the first department shall be the chairman of the Commission, who shall have direct and immediate charge of—

1. The fiscal affairs of the Commission.
2. The purchase and delivery of all materials and supplies.
3. The accounts, bookkeeping, and audits.
4. The commercial operations in the United States of the Panama Railroad and steamship lines.
5. He shall have charge of the general concerns of the Commission, subject to the supervision and direction of the Secretary of War, and shall perform such other duties as may be placed upon him from time to time by the Secretary of War.

(b) The head of the second department shall be the governor of the Zone, with the duties and powers indicated in the Executive order of May 9, 1904, which includes, in general—

1. The administration and enforcement of law in the Zone.
2. All matters of sanitation within the Canal Zone and also in the cities of Panama and Colon and the harbor, etc., so far as authorized by the treaty, the Executive orders and decrees of December 3, 1904, between the United States and the Republic of Panama relating thereto.

3. The custody of all supplies needed for sanitary purposes and such construction necessary for sanitary purposes as may be assigned to this department by the Commission.

4. Such other duties as he may be charged with from time to time by the Secretary of War.

5. He shall reside on the Isthmus and devote his entire time to the service, except when granted leave of absence by the Secretary of War.

(c) The head of the third department shall be the chief engineer. He shall have full charge on the Isthmus—

1. Of all the actual work of construction carried on by the Commission on the Isthmus.
2. The custody of all supplies and plant of the Commission upon the Isthmus.
3. The practical operation of the railroad on the Isthmus, with the special view to its utilization in canal construction work.
4. He shall reside on the Isthmus and devote his entire time to the service, except when granted leave of absence by the Secretary of War.

APPOINTMENT OF OFFICERS.

All officers and employees shall be appointed and their salaries shall be fixed by the head of the department in which they are engaged. Their appointment and salary shall be subject to the approval either of the Commission or, if the Commission is not in session, of the executive committee. The employment of laborers, where the contract of employment is made in the United States or outside of the Isthmus, shall be negotiated and concluded by the chairman of the Commission, subject to the approval of the executive committee. Where the employment of laborers is effected upon the Isthmus, it shall be conducted under the supervision of the chief engineer, subject to the approval of the executive committee.

CONTRACTS.

Contracts for the purchase of supplies or for construction involving an estimated expenditure exceeding \$10,000 shall only be made after due public advertisement in newspapers of general circulation, and shall be awarded to the

lowest responsible bidder, except in case of emergency, when, with the approval of the Secretary of War, advertising may be dispensed with. In the making of contracts for supplies or construction involving an estimated expenditure of more than \$1,000 or less than \$10,000 competitive bids should be secured by invitation or advertisement whenever practicable.

As soon as practicable after the date of this order, the Isthmian Canal Commission, as hereafter constituted, shall hold a session in the city of Washington for the general purpose of reorganization under this order, and for the special purpose of fixing the number and character of officers and employees to serve in the city of Washington in the work of the Commission. The Commission is especially charged with the duty of maintaining a complete system of accounts on the Isthmus, which shall be duplicated in Washington, so that there may always be in Washington the proper means of informing the President, the Secretary of War, and the Congress of the amount of work done, the cost of the same, the amount of money available, the amount of money expended, and the general financial condition of the enterprise.

BOARD OF CONSULTING ENGINEERS.

There will hereafter be appointed by the President, nine civil engineers of the highest standing having experience in works of canal construction and hydraulics to constitute a board of consulting engineers, to which will be submitted by the Isthmian Canal Commission for its consideration and advice the important engineering questions arising in the selection of the best plan for the construction of the canal. The recommendation of the board of consulting engineers shall be considered by the Isthmian Canal Commission, and, with the recommendations of the Commission, shall finally be submitted through the Secretary of War to the President for his decision.

REPORTS.

The executive officers of the Commission shall make duplicate reports upon the work and operation of their respective departments to the Secretary of War and the Isthmian Canal Commission from time to time, and as often as may be required by the Secretary of War or the chairman of the Commission.

The Secretary of War will make to the President a report at least annually and as often as he may deem advisable or the President may require.

All executive orders relating to the subject of the Panama Canal, except so far as they may be inconsistent with the present order, remain in force.

Theodore P. Shonts is hereby appointed a member of the Isthmian Canal Commission and its chairman; Charles E. Magoon is hereby appointed a member of the Commission and governor of the Canal Zone; the appointment as governor shall take effect upon the date of his arrival on the Isthmus, and the resignation of the present incumbent of said office shall thereupon take effect; John F. Wallace is hereby appointed member of the Commission and chief engineer; Rear-Admiral Mordecai T. Endicott, U. S. Navy; Brig. Gen. Peter C. Hains, U. S. Army (retired); Col. Oswald H. Ernst, Corps of Engineers, U. S. Army, and Benjamin M. Harrod are hereby appointed members of the Isthmian Canal Commission.

THEODORE ROOSEVELT.

By direction of the President, and in accordance with his order of April 1, 1905, each of the seven members of the Isthmian Canal Commission shall be allowed and paid a salary of \$7,500 per annum as such member. In addition to their several salaries as members of the Commission, the chairman of the

Commission shall be allowed and paid a salary of \$22,500 per annum; the chief engineer shall be allowed and paid a salary of \$17,500 per annum, and the governor of the Zone shall be allowed and paid a salary of \$10,000, and each of said officers shall be allowed the use of a furnished dwelling house on the Isthmus. The members of the Commission other than the heads of the above-named departments will be allowed and paid their actual and necessary expenses while in attendance at the regular or specially called meetings of the Commission held on the Isthmus, and also their actual traveling expenses to and from the meetings of the Commission on the Isthmus or at Washington, as the case may be; and the three heads of the departments above mentioned shall be allowed and paid their expenses of travel while on the business of the Commission.

The present governor of the Zone, Maj. Gen. George W. Davis, will be allowed and paid up to the date when his resignation as governor becomes effective, and notwithstanding his resignation as a member of the Commission, compensation at the same rate as he is now receiving as a member of the Commission and as governor of the Zone, together with his actual and necessary traveling expenses to his home in the United States.

WILLIAM H. TAFT, *Secretary of War.*

APRIL 3, 1905.

CHANGES IN ORGANIZATION.

Mr. John F. Wallace, a member of the Commission and of the executive committee, tendered his resignation on June 23, which was accepted, and the vacancy thus created on the Commission and the executive committee remains unfilled. With the approval of the President and the Secretary of War, the Commission secured the services of Mr. John F. Stevens as chief engineer, but as he is not a member of the Commission or of the executive committee the direct jurisdiction of the chairman was extended over the department of construction and engineering. Mr. Stevens sailed for the Isthmus on July 20.

The Commission at a meeting on the day following the resignation of Mr. Wallace directed that an inspection be made of the condition of the work on July 1, by General Hains and Major Harrod of the engineering committee, and if possible by Colonel Ernst also. General Hains and Major Harrod went at once to the Isthmus and reported on July 17. Colonel Ernst went a few weeks later and reported on August 1. These reports are appended hereto, marked "Exhibit D."

Pursuant to instructions contained in the Executive order of the President dated April 1, the Commission immediately reorganized the Washington office, as set forth in the order of the chairman appended hereto, marked Exhibit E.

Mr. Joseph Bucklin Bishop was appointed secretary of the Commission September 7, 1905.

The quarters occupied by the Commission in the Evening Star Building at the time of assumption of office by the present Commission were inadequate, both as to size and arrangement. The office

was therefore removed to the newly constructed fireproof building opposite the War Department, which was secured at a rental of \$1,000 per month. It is believed that the increase in rental entailed by this change has been more than offset by the increased efficiency due to improved office facilities.

The department of government and sanitation on the Isthmus has been completely organized, as shown by the report of the head of that department, Governor Magoon, hereto attached. (Exhibit A.)

The department of construction and engineering on the Isthmus has been organized and its powers and duties defined, as set forth in the accompanying Exhibit F, effective September 1, 1905. The report of Mr. Stevens, chief engineer, on the work of this department since he became its head, is appended. (Exhibit B.)

PREPARATORY WORK.

The members of the Commission decided, during their first trip to the Isthmus, that it would be useless to hope for large and satisfactory results in canal work, either in quantity of excavation or in cost, until thorough preparation had been accomplished in several directions. The Isthmus must be made healthy by thorough sanitation, proper quarters and food must be provided for employees, and adequate terminal facilities must be constructed for the prompt and economic handling of supplies and material. It was decided, therefore, to stop at once excavation on a large scale until the preparatory work was done. The Commission realized that this was a radical change of policy, but believed that it would be approved when a full statement should be made of existing conditions and of the difficulties to be overcome before canal construction could be undertaken in accordance with a comprehensive and systematic plan.

HEALTH AND SANITATION.

In order to make the Isthmus a place fit to live in and to work in the first essential was its thorough sanitation. The organization of the hospital and sanitary corps and the work upon which it is engaged, including the installation of sewerage and water systems and the paving of the streets of Panama and Colon, are completely and fully treated by Governor Magoon in the report mentioned above.

Four thousand one hundred men are now employed in the sanitary undertaking, and so effective has been this work that yellow fever has been virtually extirpated from the Isthmus, as the statistics given in the following table will show:

Month.	Cases.	Deaths.	Month.	Cases.	Deaths.
April	9	2	August	27	9
May	33	8	September	7	4
June	62	19	October	4	2
July	45	15			

The mortality and hospital statistics bear witness to the success of the work of the health department during the year. The constant ineffectiveness from all diseases among the laborers scattered along the canal has at no time been as high as 30 per 1,000. The death rate on the Isthmus for the year has been about 53.78 per 1,000, but among the employees of the Commission the rate of mortality has been only 24.30 per 1,000, which is probably as low as might be reasonably expected among an equal number of men engaged in similar work in any climate.

Comparisons with the records of the French are the best indication of what has been accomplished. In October, 1884, when the French company had on the Isthmus a force of 19,234, it lost 161 men. In October, 1905, the Isthmian Canal Commission and the Panama Railroad Company, employing 19,685 men, lost only 55.

The largest number of deaths during the year attributed to any one disease was due to malarial fever, which claimed 85 victims in the four months from May 1 to August 31, 1905. During the same period there were 54 deaths from consumption, 49 from pneumonia, 47 from yellow fever, 46 from dysentery, and 57 from diarrhea and enteritis. Deaths from any one other cause were not numerous.

In view of the gratifying conditions shown by these statistics and the complete success attending the efforts of the health department to check the yellow-fever epidemic of May and June and to arrest in its early stages the outbreak of bubonic plague at La Boca, it may be safely said that the problem of sanitation need no longer be considered a formidable obstacle to the construction of the canal.

CARE OF EMPLOYEES.

Other essentials of scarcely less importance than the thorough sanitation of the Isthmus were the providing of suitable habitations for all classes of employees and the establishing of a system of food supply which would afford all employees opportunity of obtaining wholesome food at reasonable cost.

The Commission inherited from the French company 2,175 buildings, all in bad condition. Of these, 22 were destroyed. During the past year 649 of the others have been repaired, 58 new buildings have been erected, and 67 more are in course of construction. Two new hotels, three stories high and containing from 55 to 60 rooms each, have been completed, and authority has been granted for eight others, a portion of which are under construction at the present time. Work is in progress also on cottages for married employees, on bachelor quarters, and for shops and storehouses. In this work of construction 2,400 men are employed, and additional carpenters and other building trade workers are being sent out with every steamer. This work is being pressed forward with the utmost vigor.

Deaths.

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The total amount expended has been \$1,039,451.88, of which \$286,487.88 was for the period prior to April 3, 1905, and \$752,964.50 for the period subsequent to April 3, 1905.

The question of food supplies was the most serious problem that confronted the Commission. If the men could not be fed the canal could not be built. Owing to the fact that the natives never look beyond their present necessities, no surplus food supply ever accumulates. This normal condition of no surplus was greatly intensified by the almost total failure of the crops for the two preceding years, by the abandonment by agricultural laborers of their farms back in the hills for work on the canal, where they received higher pay for shorter hours, and by quarantine against the port of Panama on account of bubonic plague, which prevented the arrival of food stuff from neighboring provinces.

The Commission was thus brought face to face with the problem of feeding 17,000 men with base of supplies 2,000 miles away.

It was immediately arranged to open local commissary stores at every important labor camp, to provide mess houses, and to furnish food, both cooked and uncooked, to all employees at cost. Orders were sent by cable to have the Commission's steamers equipped with refrigerating plants, arrangements were made for the erection of a temporary cold-storage plant at Colon, and refrigerator cars were purchased for immediate shipment to the Isthmus, thus establishing a line of refrigeration from the markets of the United States to the commissary stations of the Isthmus. The equipment in existing hotels was also purchased from individual lessees and their management assumed by the Commission. The net result of these efforts is that to-day all employees are given opportunity to obtain an abundant supply of wholesome food, cooked and uncooked, at reasonable prices. The silver men—that is, the common laborers—are being fed for 30 cents per day and the gold employees—that is, those of the higher class—at 90 cents per day, and they get good food in place of bad.

RECREATION FOR EMPLOYEES.

The Commission is strongly convinced that in a work of this kind to be performed in an environment entirely different from that which ordinarily prevails in the community from which the American employees come, the Government must lend its support to the creation of a substitute for the salutary restraints of home, family, and public opinion of the community from which its employees are freed. To this end eight buildings belonging to the Commission have been assigned for church purposes, and, when they shall have been completed, schoolhouses will be available on Sundays for the holding of religious services.

The Commission also adopted the following resolution on November 9, 1905:

Resolved, That the Commission is willing to furnish houses to be used for club purposes, provided such clubs shall be open to all bona fide gold employees who comply with reasonable regulations, the size of house to depend in each instance upon the size of the club formed: *Provided further*, That the members shall furnish and maintain the club after it shall have been formed: *Provided further*, That the regulations to govern such clubs and the necessity and advisability of the erection of club houses shall be first approved by the governor of the Canal Zone or the chief engineer of the Commission: *And provided further*, That the cost of no club house shall exceed \$7,500.

The more urgent work of immediately creating proper facilities for the housing and feeding of employees has prevented the Commission from carrying out in its entirety its plan of providing for the recreation of employees. Reading rooms, however, have been established in the Commission hotels now in operation, and this plan will be continued with the hotels in process of construction. A vessel of the Commission is utilized for free excursions for employees, when practicable, to the island of Taboga, in the Bay of Panama.

The conditions of employment grant free quarters for the families of officers and employees of the Commission, and these are also given a reduced rate of \$20 for transportation between New York and Colon. It is believed that the ultimate result will be the establishment of social conditions on the Isthmus which will tend to increase greatly the stability and permanency of the force, and thereby enhance its efficiency.

PERSONNEL.

The force employed on the Isthmus on November 15, 1905, was as follows:

In November, 1904, the Commission's employees on the Isthmus numbered 3,500. In November, 1905, they numbered, approximately, 17,000. Of these, 11,300 were under the department of construction and engineering, 2,600 under the bureau of material and supplies, and 3,050 under the department of government and sanitation. There were in the local auditor's office 46 men and in the office of the disbursing officer 21.

Of the 17,000 employees about 2,705 were on the gold rolls and 14,250 on the silver rolls.

The number of white Americans on the Isthmus is estimated at 1,500. The Panama Railroad Company employs about 2,500 men, who are not included in the total of 17,000.

UNSKILLED LABOR.

The question of labor is a grave and perplexing one. A sufficient supply of labor can be secured from near-by tropical islands and coun-

tries, so far as numbers are concerned. The question of quality is a very different matter. Unless a much greater efficiency can be developed than is secured at present it will be necessary to look elsewhere for a better class.

The present wage varies from 80 cents to \$1.04 per day in gold. As compared with the best common labor in the United States, its efficiency is rated at from 25 to 33 per cent. Over 80 per cent of the employees of the canal are now and will continue to be alien laborers. A majority of the other 20 per cent employed will be in a clerical, a supervisory, or in some other capacity to which the various labor laws of the United States are not applicable. It is to this kind of labor we are compelled to apply the eight-hour law—that is, to aliens who know nothing of the law's existence until they arrive on the Isthmus. Such application will increase the labor cost of canal construction at least 25 per cent and will add many millions unnecessarily to the total expenditure.

The application of laws passed or to be passed by Congress for the benefit of American labor at home to labor on the Isthmus will benefit a very small number of American laborers, but will enormously add to the cost of construction, and American labor at home will have to pay its share of the consequent increase in taxation.

In the opinion of the Commission, it is a mistake to handicap the construction of the Panama Canal with any laws save those of police and sanitation. The Commission strongly recommends that labor on the Isthmus be excluded from the application of the eight-hour law, the contract-labor law, the Chinese-exclusion act, and any other law passed or to be passed by Congress for the benefit of American labor at home.

EMPLOYMENT AND TRANSPORTATION.

Regulations governing the employment and transportation, the granting of leaves of absence, allowances, and other conditions of employment of all officers and employees for duty on the Isthmus have been adopted, and, with subsequent amendments, are now applicable in the form as set forth in Exhibit G.

On November 15, 1904, by Executive order of the President, all employments on the Isthmus of Panama, except persons employed merely as laborers, were made subject to civil-service laws and rules.

Appointments to the indoor office positions, such as clerk, accountant, and stenographer, and to the positions in the hospital service such as interne, physician, and nurse, are made after competitive examination and certification by the Civil Service Commission. Difficulty was experienced, however, after the present Commission assumed office in securing through this means a sufficient number of

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properly qualified men for the outdoor technical, mechanical, building trades, and railroad positions.

But with the hearty cooperation of the Civil Service Commission a plan has been adopted for securing the large number of persons of this character desired. Joint representatives of the two Commissions are charged with the personal examination and investigation of the habits and capacity of those to be selected, with power to certify their fitness. By reason of the great activity prevailing in this country in both railroad and building construction some difficulty was experienced for a time in securing a sufficient number of properly qualified carpenters, plumbers, machinists, boiler makers, track foremen, and similar employees. Furthermore, the sensational stories which were published throughout the country several months ago in regard to health and other conditions had their effect, but as nine-tenths of the men who have accepted employment on the Isthmus with the honest purpose to work have, through their correspondence and in other ways, proved these stories to be unfounded, this obstacle no longer exists.

From January 1 to December 1, 1905, 2,725 persons were appointed in the United States for service on the Isthmus of Panama in 153 different grades of positions, and of the above number appointed 2,043 persons have been transported to their places of duty, the remainder having failed to sail after selection and appointment. Two hundred and sixty-seven members of families and 275 persons returning from leave of absence have also been furnished transportation at the reduced Government rate during the same period from New York City over the Panama Steamship Company's lines. The above number does not include the returning employees and members of families who have sailed from the ports of New Orleans and San Francisco.

During the past summer complete data relative to all officers and employees has been secured, and a complete service record-card system has been established, giving the official history of all officers and employees, with the exception of laborers.

With this information as a basis and with a monthly report of changes in the service, an accountability is now rendered to the Civil Service Commission relative to the employees of the Canal Commission as required by the rules and regulations.

The Civil Service Commission has cooperated most heartily with the Canal Commission in the adoption of rules and regulations, consistent with the system of selection on merit, for the control of the vast army of employees to be stationed on the Isthmus.

ENGINEERING WORK OF THE YEAR.

While this preparatory work has been in progress very little has been done in the way of actual excavation. Eleven steam shovels have been at different times in operation, however, in the Culebra cut, which is the largest single factor in the construction of the canal, and approximately 1,000,000 cubic yards of material have been removed. By this work two things are being accomplished. First, the levels of the cut are being put in proper condition for the installation of the largest number of machines which can be effectively operated, and second, data is being gathered which will be useful in future estimates of the cost of canal construction.

In the Culebra work 2,600 men are now employed. Railway tracks and yards have been built, and dredging has been done at both ends of the canal so far as advisable until the question of type of canal is decided. It should be understood that all the work done is applicable to any type of canal.

At the Colon end of the canal surveys were made with a view to the construction of an outer harbor, a direct entrance to the canal, an inner harbor, and the completion of the Gatun diversion.

Bids were invited by public advertisement for widening and deepening the Colon end of the canal with a view to its immediate utilization for the reception of construction material, but as the bids were deemed high and as sufficient time had not been given to bidders to make the investigations necessary they were rejected.

Extensive subsurface investigations were carried on to determine the character of the material to be excavated in making this harbor. One of the old French dredges was fitted up and placed on the work of deepening the entrance to Cristobal Harbor. This dredge has a capacity of from 200 to 250 cubic yards per hour. The material excavated is towed to sea in barges.

Examinations were made at Gatun during the year 1904 to determine the practicability of building a dam across the Chagres Valley in that vicinity. Within the last three months these examinations and surveys have been extended with a view to furnishing additional data to the board of consulting engineers.

Surveys were also made of the Tiger Hill cut-off, whereby the length of the canal could be somewhat shortened. The result shows that the change in location would not be advantageous.

At Bohio, where the Commission of 1899-1901 had recommended the construction of a dam, additional examinations and borings were made with a view of determining the full depth of the geological valley.

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For a sea-level canal, the construction of a dam at Gamboa to impound the freshet waters of the upper Chagres is essential in most of the plans which have been considered. The examinations and borings made by the French company were supplemented by others more extensive under the direction of the Commission, which establish the fact that a dam here is practicable. In connection with these examinations at the dam site topographic surveys were extended over the valley of the upper Chagres to determine the area of the lake which would be formed by the dam and also the feasibility of discharging the surplus waters of the river into the Atlantic or Pacific Ocean.

At the Pacific end of the canal work was delayed by the quarantine established at La Boca against the bubonic plague. Surveys to locate the line of canal, soundings in the harbor, tidal observations, and borings were made.

One of the old French dredges has been kept at work constantly in enlarging and maintaining the channel leading to and in front of the steel pier, where a heavy shoaling has taken place since it was excavated.

The gaugings of the Chagres River have been continued at several points, and self-recording rain gauges have been established. Fluvio-graph stations have been put in order and the seismograph has been repaired and is now in service.

Borings have been made along the line of the canal at frequent intervals, from one end to the other, to determine the character of the material to be removed for any type of canal that may be adopted.

The question of water supply for Panama, Colon, and the camps along the line of the canal received early attention. The dam across the Rio Grande was raised so as to create a reservoir from which the city of Panama derives an ample supply. Water was turned into the pipe lines June 26. Up to September 30 more than half of the entire work of laying the mains and making house connections in the city of Panama had been completed.

For supplying Colon, a temporary dam was built across Brazos Brook, creating a reservoir to serve until the permanent one is completed. Reservoirs and distributing systems were built at Ancon, La Boca, Culebra, and other points along the line of the canal.

The sewerage system of Panama is now well advanced, nearly two-thirds of the total amount of work having been completed, the material for the remainder being on the ground.

Considerable work has also been done on the roads leading into Panama, and although no actual paving has yet been done in that city, as is contemplated, some grading has been done and preparations made to receive brick and other material which are arriving on

the Isthmus. The cost of the water supply and sewerage systems for the cities of Panama and Colon will, under the terms of the treaty, ultimately be paid back to the United States by the Republic of Panama.

The work in the Culebra cut was gradually expanded, until in June eleven steam shovels were in operation. The material, as shown by actual work performed and by numerous borings and test pits, is of a mixed character, varying in degrees of hardness from that of ordinary earth to hard trap rock, irregularly disposed, but nearly all of it requiring blasting to be economically handled. This work was undertaken chiefly to determine by actual experiment the cost of excavation, but inasmuch as the railroad tracks were laid in a temporary manner, the old French cars were of insufficient capacity, the dumps not well selected, and the housing and feeding of employees so unsatisfactory as to cause much sickness, the experiment can not be regarded as a success. The cost of removing this material varied in different months from 43 cents to \$1.53 per cubic yard.

The data now collected on the Panama Isthmus leave little or nothing in that line to be desired in studies having for their object the determination of the type of canal. Few engineering works (possibly none) have ever been undertaken with more complete physical data available.

The act approved June 28, 1902, pledged for the construction of the canal \$145,000,000, of which it appropriated \$10,000,000, this total being practically the estimated cost of the project submitted by the Isthmian Canal Commission of 1899-1901. That appropriation was made under conditions and circumstances almost identical to those that are followed for harbor and river works, and leaves no doubt that the project adopted by Congress was the one submitted by that Commission, and all construction work done thus far has been under and in accordance with that project.

The Commission appointed in March, 1904, had under consideration at the time it was disbanded, in March, 1905, a project for a sea-level canal. As a sea-level canal, however, could not be built for the amount authorized by law, and inasmuch as there seemed to be a difference of opinion among engineers as to the best type of canal, the President, by Executive order, ordered a board of consulting engineers to convene in the city of Washington for the purpose of considering the type of canal to be constructed through the Isthmus of Panama.

The Isthmian Canal Commission by that order was directed to have all proposed plans in detailed form, with maps and surveys and other documents sufficient to enable the consulting engineers to decide the questions presented to them. This was done, and the

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board met on the 1st of September, visited the Isthmus during October, and has been giving the subject careful study since. It is expected that the report of this board will be made to the Commission in a short time.

The work on the Culebra cut was undertaken with the idea that the excavation done would be useful in any plan or any type of canal that might be adopted. This is only true to a limited extent. No systematic organization for attacking this cut can be effected until it is known how much material is to be removed and the depth to which the cut is to be excavated. If 120,000,000 cubic yards are to be removed it must be attacked in an entirely different manner from what it would be if only 40,000,000 or 50,000,000 cubic yards were to be removed. If the sea-level type be adopted about one-eighth of the total in that cut will be rock under water, whereas in the case of a lock-level canal with a summit not less than 60 feet above tide there will be none. It is therefore of the utmost importance that the type of canal be decided upon with the least possible delay.

For further details, attention is invited to the report of Chief Engineer John F. Stevens. [Exhibit B.]

MATERIALS AND SUPPLIES.

All purchases and contracts on behalf of the Commission are made in accordance with instructions contained in the Executive order of April 1, 1905, reorganizing the Commission.

Regulations have been adopted governing the purchase, delivery, and issuing of and accounting for materials and supplies. [Exhibit H.]

The general purchasing officer is located at Washington, with assistant purchasing and shipping agents at New York, New Orleans, Tacoma, and San Francisco.

On August 1 the jurisdiction of the general purchasing officer was extended over the division of materials and supplies on the Isthmus, thereby centralizing all work relating to the purchase, shipment, and issue for consumption of all articles entering into the construction of the canal and the necessary collateral work.

It is the fixed practice to call for bids on the basis of the price covering delivery on the Isthmus, which gives each section of the country equal opportunity for bidding on the supplies, so that the manufacturers, railroads, and steamship lines in each section of the country and through each port may figure on the business on a combination of prices and rates. The only departures that have been made from this policy were in cases where materials were wanted in an emer-

gency and where delivery was called for by a certain time, making it necessary to ship via the most direct and expeditious route.

In order to protect the Government from the charge of making low rates by its own steamship line (which would have resulted in all ports insisting that if the Government made rates from New York less than would be profitable to private enterprises it would only be fair that it should establish similar service from their ports) the rail connections of the steamship line at New York and the initial lines were given the rate-making power on percentage divisions, with the result that the seller in each territory can arrange for his through rate with the originating rail line.

Furthermore, if competition between the roads leading to New York and the Mississippi Valley roads leading to the Gulf ports should result in extremely low rates, the Government would gain more through the reduced price of delivery of materials on the Isthmus than it would lose by reason of the low rate on its steamship line.

An arrangement has been made with the Office of the Surgeon-General, United States Army, whereby all requisitions from the Isthmus for drugs, chemicals, and similar supplies for the hospital and sanitary department are filled through the medical supply depot of the Army situated in New York. This depot carries a reserve stock of supplies of this character already tested, in some instances sufficient to fill immediately the urgent requisitions from the Isthmus.

This has reduced to the minimum the time of delivery, and the thanks of the Commission are due and are hereby extended to the Medical Department of the Army for its hearty cooperation. In some instances requisitions for medical supplies have been filled and shipped from New York within twenty four hours after their receipt.

Various other branches of the Government have also cooperated in a very satisfactory manner with the Commission in the purchase, testing, and inspection of scientific or special equipment relating to their particular work.

A form of proposal containing general instructions to bidders and giving greater detail with reference to the method of making proposals is hereby appended, marked "Exhibit I."

PURCHASES FOR PLANT AND PRELIMINARY WORK.

While this necessary work of sanitating the Isthmus and providing for the health and welfare of the employees was in progress, the task of purchasing, forwarding, and distributing the enormous quantity of material and supplies of all kinds was receiving constant and most careful attention. The purchases included not only the items

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entering into the permanent plant but also those required for the preliminary work. The approximate total cost of these purchases was about \$9,000,000, and a list of the more important of them is appended:

Ocean steamships-----	2	Cement -----barrels--	36,000
Steam shovels-----	61	Doors and sash-----	30,000
Locomotives-----	120	Sewer pipe, and necessary	
Flat cars-----	1,300	fittings -----feet--	100,000
Dump cars-----	324	Iron pipe, and necessary	
Rapid unloaders-----	12	fittings -----tons--	14,500
Unloading plows-----	22	Wire screening ---sq. yds--	137,000
Earth spreaders-----	13	Corrugated - Iron roofing,	
Dipper dredges-----	2	square feet -----	503,000
Steel barges-----	11	Steel water tanks and tow-	
Stone-crushing plants-----	2	ers -----	3
Steel rails, and necessary		Standpipes -----	14
fastenings for same,		Air-compressing machines--	14
tons -----	5,000	Cranes -----	3
Switch stands-----	200	Rock drills-----	152
Split switches-----	200	Portable deep-drilling ma-	
Rigid frogs-----	200	chines -----	30
Cross-ties-----	125,000	Hoisting engines-----	12
Pieces of piling-----	12,000	Blasting powder--pounds--	640,000
Lumber -----feet--	35,000,000	Dynamite -----do--	617,500
Paving brick-----	7,000,000	Dump wagons and other	
Building brick-----	3,500,000	vehicles -----	135
Roofing tile--square feet--	500,000	Mules -----	280

It was found to be inexpedient for many reasons, economic and other, to take an inventory of equipment, machinery, and supplies acquired from the New Panama Canal Company, a large part of which is of no value. It was therefore ordered that a record be kept of only such equipment, machinery, and supplies as may be used in the construction of the canal, the value of such usable supplies to be placed at 50 per cent of the cost of new material of the same quality, except that scrap metal should be taken up as used at current prices of scrap metal, less cost of preparing it for use.

PURCHASE OF SHIPS.

In order to provide facilities to meet its increased freight and passenger movement and in order to replace steamers operated under expensive charter, the Commission purchased the two American steamers *Mexico* and *Havana* from the Ward Line, at \$650,000 each, which is less than the original cost of the vessels. Their deterioration, if any, has been more than offset by the increased cost of material entering into the construction of vessels since these were built. They are of 5,500 tons burden and capable of sustaining a speed of 16 knots, accommodating 100 first-class and 50 second-class

passengers, and as they were built for the tropical trade they are especially adapted to the Panama Railroad's requirements. The vessels were subsequently chartered to the Panama Railroad Company, the Commission to receive as a consideration a sum equal to interest at the rate of 4 per cent per annum on the cost of the vessels, and an additional sum equal to $\frac{1}{2}$ per cent of said cost to cover loss from deterioration, the Panama Railroad to insure the vessels in favor of the Commission for the cost prices.

Full details relating to the purchase and charter of these vessels are set forth in the report of the proceedings of both the Commission and the railroad.

TELEGRAPH AND CABLE COMMUNICATIONS.

An arrangement has been entered into between the Canal Commission and the Central and South American Telegraph Company whereby the latter is to transmit all cable messages at the cost of 25 cents per word between Galveston and the Isthmus of Panama, the former price having been 65 cents per word.

Cable codes suitable to the needs of the work have been adopted for the condensation of messages between Washington and the Isthmus.

A telephone system connecting all parts of the work on the Isthmus has been authorized, and its construction is under way.

THE PANAMA RAILROAD.

The entire stock of the Panama Railroad and Steamship Line is now owned by the United States Government, except one share each, which it has transferred to the directors to enable them to qualify under the articles of incorporation. But while the stock is owned by the Government the bonds are largely in the hands of the public.

The road does a commercial business and is at the same time an essential instrument to be used in the construction of the canal. The report of its operations in detail properly constitutes a part of the report of the president of that road, and not of the Commission. The interests of the canal and of the railroad are so closely allied, however, and their physical connection so interwoven that any comment on the one necessarily involves the other. Furthermore, the officials of the Canal Commission are in many instances officials of the Panama Railroad.

The enlargement and improvement of the facilities for receiving and distributing the immense quantities of materials and supplies which will enter into the construction of the canal as well as into the preliminary work incident thereto have been among the important

tasks falling upon the present Commission. The railroad as acquired from the French had been neglected and its equipment allowed to become obsolete. Its personnel had not been educated on modern lines, and there was an entire absence of mechanical appliances to assist in receiving or distributing cargoes. Aside from the necessary transportation of materials and supplies and of officials and employees, the problem of the Culebra cut, the largest factor which will enter into the construction of the canal without regard to its type, is one of transportation pure and simple. The excavated matter can be loaded with reasonable promptness, but the hauling and disposition of it constitutes a task of the first magnitude.

To meet these conditions it was necessary, therefore, to begin at once the construction of new wharves equipped with modern mechanical appliances; of large terminal yards at both ends of the road; of extensive warehouses; of suitable machine shops, and of a modern coal-hoisting plant, which will reduce the cost of handling coal from ship to engines from \$1.30 to about 12 cents per ton. New and more powerful locomotives, larger cars for both passenger and freight services, and heavier steel rails for relaying the road have been purchased, and the bridges have been strengthened to enable them to carry the heavier equipment. The personnel of the road has been reorganized, putting into the higher positions experienced, aggressive, up-to-date men, with the result that with the old equipment and facilities they cleared up during the month of October an accumulation of over 12,000 tons of commercial freight, and since that time conditions have been normal. With the advent of increased dock facilities, terminal yards now nearly complete, and new power and equipment now arriving, the road will be in a position to handle efficiently and economically a vastly larger volume of business than heretofore.

The reconstruction of old tracks and the laying of new ones properly built, all looking to as complete a system as possible to handle the transportation of the immense amount of material certain to be excavated under any plan of canal, has been energetically pushed, and the entire available force, since the 15th of August, has been engaged in this preparatory work.

The transportation of materials and supplies entering into the construction of the canal, and especially the disposal of excavated material from the Culebra cut, will require that the Panama Railroad be double tracked in whole or in part. As this enlargement of capacity is made necessary by canal construction it was decided that the expense incident thereto should be borne by the Commission, paid by it from the appropriation for the construction of the canal in monthly installments as the work advances.

MONETARY SYSTEM.

By agreement between the Secretary of War and the Republic of Panama the currency of the Republic of Panama is similar to that of the Philippine Islands. The Panama peso is declared equal in value to 50 cents gold, and is maintained at that value by the Government of Panama, with the assistance of the United States authorities.

Since April 1, to meet an embarrassing monetary situation due to the scarcity of silver coin, the Republic of Panama has been authorized to issue an additional 1,000,000 pesos in accordance with the terms of the monetary agreement, thereby placing in circulation 4,000,000 pesos Panama currency.

Further, in order to secure a reliable supply of Panama silver currency for their respective wants upon the Isthmus and to maintain a ratio between Panama silver and United States gold, the Commission, the Panama Railroad, and the Republic of Panama entered, on April 29, into an agreement with four local banks by which the latter undertook for a term of one year to furnish the Commission, the railroad, and the Republic, on ten days' written notice, with such silver currency as they might require, in exchange for drafts on New York, at the uniform rate of 2 silver pesos for \$1 United States gold. The bankers also agreed to sell drafts on the United States to the Commission, the railroad, and the Republic at the uniform rate of \$1 United States gold for 2 silver pesos and 1 cent Panama currency, and to sell such drafts on New York to the general public at a rate not to exceed 2 silver pesos and 3 cents for each dollar United States currency.

AUDITING AND ACCOUNTING OF FUNDS.

Under existing law the final audit of the funds of the Commission is vested in the Auditor for the War Department.

An auditing organization of the canal, the Canal Zone, and the Panama Railroad has been effected by the present Commission, as set forth in Exhibit J, attached.

This organization is charged with the administrative examination of all accounts of United States funds, with the examination of all claims receivable and payable in advance of settlement by collecting and disbursing officers, with the auditing of accounts of property, with the compilations concerning the operation of the construction, sanitation, and other departments under the Commission, and with the final audit of all accounts of the government of the Canal Zone, as well as with the control and final audit of the accounts of the Panama Railroad and Steamship Company.

At its first meeting the Commission ordered that the accounts and financial records of affairs be examined, audited, and reported upon by auditors engaged independently of the existing office force; that books of account of the Commission at the Panama and Washington offices be promptly balanced as of the date of transfer of Commissions, and that the books, vouchers, and records of the Commission up to this date be carefully identified and preserved for reference in the future, but that the transactions of the Commission as newly constituted be not entered therein, but be entered in an entirely new set of books of account, and that the records thereof be separately kept and preserved, so that the proceedings of the Commission as constituted can be readily and conveniently distinguished and accounted for independently of each administration. This policy has been followed.

The report made by the independent auditing company contains the following concerning the status of the fiscal affairs of the Commission when turned over to the present Commission on April 3, 1905, namely:

Appropriated funds in the United States Treasury, available for expenditure	\$7,429,068.27
Cash in the hands of collecting and disbursing officers	610,422.00
Total	8,039,490.27
The total amount expended from the appropriation of June 28, 1902, was	1,977,684.40
The miscellaneous collections to April 1, 1905, were	17,176.67

No report was made by the auditing company of the unsettled accounts receivable and payable, nor of the value of material and property on hand. The present auditing organization is engaged in preparing a statement of property and assets of the present Commission, and the report will indicate the status of the property account on April 1, 1905, as well as on the current date for which it may be prepared.

From April 1 to June 30, 1905, the present Commission expended the sum of	\$2,031,857.36
The amount paid for indebtedness incurred prior to April 1, 1905, is	788,371.51
The amount paid for current expenses, supplies, and equipment purchased after April 3, 1905, is	1,243,485.85
Miscellaneous receipts from April 1 to June 30, amounted to	49,446.22
There were also collected from April 1 to June 30 miscellaneous receipts pertaining to the period prior to April 1, 1905, in the sum of	26,336.40

FINANCES.

All expenditures up to the present time have been paid out of the appropriation of \$10,000,000 made by the Congress on June 28, 1902.

The following exhibits are submitted as showing the disbursements made from the appropriation:

Exhibit K.—Detailed statement of expenditures to June 30, 1905, by departments.

Exhibit L.—Detailed statement of expenditures, July 1 to September 30, 1905, by departments.

Exhibit M.—Consolidated statement of expenditures to September 30, 1905.

Under Exhibit N is shown a statement of miscellaneous receipts from all sources.

In the act of Congress authorizing the construction of the canal and appropriating \$10,000,000 for the preliminary work, there was a further authorization for the Commission to enter into contracts for the work, with a total not to exceed \$135,000,000, to meet which Congress would from time to time, as the necessities required, make suitable appropriation. Under the provision of this authorization the Commission has entered into contracts for materials and supplies for future delivery, which are essential to the construction of the canal, the orders for which must be placed considerably in advance of the time when they are to be needed because the industries of the United States are so crowded with domestic business that immediate delivery of such articles can not be made.

The pay roll on the Isthmus at present amounts to approximately \$600,000 per month. An immediate appropriation is therefore necessary, and estimates for such appropriation for the period ending June 30, 1906, have already been transmitted to you, as follows:

1. "Estimated liabilities to December 1, 1905, covering material ordered and in transit"-----	\$4,000,000
Fuel -----	\$185,000.00
Explosives -----	45,920.00
Household and office furnishings-----	165,773.00
Lumber and lumber products-----	957,061.00
Machinery -----	455,679.00
Plumbing supplies-----	347,430.00
Railway equipment, including repair parts-----	511,970.00
Roofing and paving material-----	417,936.00
Medical and sanitary supplies-----	229,425.00
Steam shovels, dredges, and drills-----	157,183.00
Water and sewer pipes-----	223,084.00
Sulphuric acid, beeswax, turpentine, etc-----	10,934.00
Japanned dryer, red ochre, etc-----	19,447.00
25,000 gallons linseed oil-----	13,150.00
Tents and accessories-----	12,821.00
Swivel hooks, snatch blocks, wire rope, emery paper, etc-----	5,546.00
Iron bolts, spikes, sheathing nails-----	12,466.00
Red and white lead-----	16,275.00
Fire hose-----	4,821.00
Rope-----	2,454.00

1. "Estimated liabilities," etc.—Continued.

227,000 pounds round iron.....	\$4,500.00
Laundry equipment.....	5,004.00
Cement.....	30,000.00
Forage.....	20,535.00
Steam-shovel repair parts.....	15,020.00
Portable well-drilling tools and repair parts.....	14,450.00
Coal-chute pockets.....	5,500.00
Bridge floor beams and rivets.....	4,402.00
Stationery and printing.....	10,373.00
Engineering instruments, draftsman's supplies..	7,000.00
Pipe tongs, wrenches, and valves.....	1,400.00
Malleable-iron castings.....	2,684.00
Garbage carts.....	450.00
Brass castings.....	2,607.00
Numbering machines.....	750.00
Stationery.....	15,922.00
Crane chains.....	1,330.00
Wire cables.....	384.00
Steel vault doors.....	1,381.00
Whitewashing machines.....	273.00
Furniture and equipment for quarters.....	1,302.00
Instruments, bureau of meteorology and river hydraulics.....	1,355.00
Typewriters.....	2,024.00
Wagon parts and repair parts.....	7,813.00
Police equipment, watchman clocks, handcuffs, etc.....	1,140.00
Miscellaneous: Crude petroleum, water tanks, working rowboats, varnish, expanded metal lathing, fire extinguishers, coal tar, caanned goods.....	86,614.00

Total 4,000,000.00

2. "Equipment purchased or contracted for delivery not later than June 30, 1906".....

\$3,350,000

1,100 steel flat cars.....	\$1,071,100.00
120 locomotives.....	1,307,000.00
43 steam shovels.....	403,600.00
18 unloading machines (plows, etc.).....	151,794.00
3 water tanks and towers.....	36,050.00
3 earth spreaders.....	23,382.00
2 dipper dredges.....	205,000.00
Miscellaneous.....	2,074.00

Total 3,350,000.00

3. "Estimated miscellaneous material purchases in United States from December 1, 1905, to June 30, 1906".....

2,300,000

Laundry equipment.....	\$39,491.83
Lead pipe and fittings.....	33,788.51
Iron pipe and fittings.....	200,555.30
Vitrified sewer pipe and fittings.....	97,516.86
Lumber.....	604,709.18
Cement.....	273,000.00
Forage for animals.....	133,528.50

2. "Estimated material purchases," etc.—Continued.

Machinery and tools—

Portable well-drilling machinery and repair

parts	\$101, 102.00
Steam shovel repair parts	111, 482.21
Gasoline engine and parts	5, 172.03
Pumps	2, 352.00
Bollers	0, 000.00
Drills	1, 144.50
Printing machinery	5, 805.05
Steam-shovel repair parts	111, 482.21
Pipe tools	2, 047.53
Miscellaneous tools	12, 340.23

Railway and track material and tools—

Brake shoes	4, 977.00
Other repair parts for cars	6, 793.57
Coal-chute pockets	38, 500.60
Tie plates	45, 990.00
Bridge floor beams and rivets	30, 820.30
Rail punchers and benders	4, 148.55
Stationery, office supplies, and printing	72, 613.31
Adding machine	2, 450.00
Office furniture	13, 017.62
Typewriters	18, 370.10
Wagons, carts, harness, and repair parts	54, 000.95
Police equipment, watchmen's clocks, handcuffs, etc	8, 047.76
Sanitary fixtures, water-closets, urinals, etc.	200, 055.80
Furniture and equipment for quarters	11,428.62
Engineering instruments and draftsmen's sup- plies	24, 042.62
Rubber valves for dredges	7, 074.80
Tents, cotton-duck, sponges, etc.	6, 874.91
Repair water sterilizers, wooden faucets, etc.	12, 537.00
Instruments for Bureau of Meteorology and river hydraulics	9, 485.00
Nails, bolts, rivets, and screws	1, 503.53
Safes and vault doors	4, 036.55
Brooms, brushes, etc	758.80

Total 2, 300, 000.00

4. "Estimated miscellaneous material purchases on the Isthmus, and miscellaneous expenditures from December 1, 1905, to June 30, 1906," consisting of hotel and hospital and other supplies, transportation of laborers from West Indies, etc.

\$800, 000

Monthly charges:

Transportation of labor and local transportation

on the Isthmus	\$318, 348.00
Hotel and hospital supplies	166, 838.00
Corral expenses	24, 500.00
Miscellaneous supplies and service, including lumber, hardware, house-furnishing supplies, fuel, stationery and printing	200, 318.00

Total 800, 000.00

5. "Estimated amount due the Panama Railroad Company December 1, 1905, for material and services," covering fuel and other supplies, work done, constructing sidings and second main track, installment of telegraph and telephone lines, constructing new docks and wharves, etc.		\$500,000
Steel rails	\$202,710.00	
Telegraph and telephone lines installed	40,000.00	
Completed work on second main track	35,000.00	
Maintenance of tracks	23,000.00	
Transportation of employees and supplies between New York and Panama (average monthly charge, \$11,000)	55,000.00	
Stores furnished from Isthmus storehouses, coal, cement, hardware, commissaries, etc.	60,337.13	
Repairs of cars and other work done at machine shops	23,000.00	
Installation of electric-light plant, Ancon	10,520.05	
Construction of floating pile driver	5,884.00	
Construction of warehouses	3,079.00	
Construction of docks and wharves	22,563.82	
Construction of refrigerating plants on steamers Havana and Mexico	12,000.00	
Total	500,000.00	
6. "Estimated amount due the Panama Railroad Company December 1, 1905, to June 30, 1906, for material and services, including the construction of the second main track "		500,000
Panama Railroad second main track, to be paid for by the Isthmian Canal Commission. Estimated cost, \$600,000. Estimated amount accruing from December 1, 1905, to June 30, 1906	\$400,000.00	
Transportation	70,000.00	
Material, supplies, and miscellaneous repair work	30,000.00	
Total	500,000.00	
7. "Estimated Isthmus pay rolls from December 1, 1905, to June 30, 1906," based on estimated pay roll for November, with increase of 25 per cent from January 1, 1906, on gold rolls and 50 per cent on silver rolls		4,875,000
8. "Salaries, incidental expenses, rent, etc., in the United States from December 1, 1905, to June 30, 1906," covering Washington office, including commissioners, offices of assistant purchasing agents at New York, New Orleans, San Francisco, and Tacoma, cable and telephone service, estimated at \$25,000 per month		175,000
Monthly charges:		
Salaries of commissioners and employees of		
Washington office	\$127,700.48	
Employees, New York office	7,000.00	
Employees, New Orleans office	2,041.69	
Employees, San Francisco offices	583.31	
Employees, Tacoma, Wash., offices	1,551.69	

8. "Salaries, incidental expenses, rent, etc."—Continued.

Traveling expenses	\$2,800.00
Services and traveling expenses of inspectors of materials and supplies	13,513.85
Rent	7,000.00
Fuel, light, and power	840.00
Office supplies and printing	3,500.00
Furniture and fixtures	1,400.00
Cablegrams, telegrams, and telephone	7,000.00
Total	175,000.00

Estimated requirements for the balance of the fiscal year ending
June 30, 1900.....\$10,500,000

Respectfully submitted.

THEODORE P. SHONTS, *Chairman.*

CHARLES E. MAGOON.

MORDECAI T. ENDICOTT.

PETER C. HAINS.

OSWALD H. ERNST.

BENJAMIN M. HARROD.

The Hon. WM. H. TAFT,
Secretary of War.

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EXHIBIT A.

ANNUAL REPORT OF THE GOVERNOR OF THE CANAL ZONE.

TABLE OF CONTENTS.

	Page.
1. Introduction	28
2. Yellow fever	29
3. Malaria	34
4. Bubonic plague	35
5. Sanitation of the Isthmus	38
(a) Water supply	39
(b) Sewers	41
(c) Paving	42
(d) La Boca	42
(e) Colon	43
6. Living quarters	44
7. Food supply	46
8. Delimitation of the Canal Zone	47
9. Foreign consuls to the Canal Zone	48
10. Branch commissaries	48
11. Currency agreement	49
12. Road to Savanas	50
13. Care of the insane, lepers, and indigent sick	50
14. The Sisters of St. Vincent de Paul	52
15. Office buildings	52
16. Expropriation proceedings	53
17. Material progress in the Canal Zone	53
18. Employees	54
19. Religious work on the Isthmus	56
20. Executive office	58
21. Health department	59
(a) Sanitation	59
(b) Hospitals	60
(c) Quarantine	61
(d) Ancon laboratory	61
(e) Result of sanitary work	62
22. Department of revenues	62
(a) Customs service	63
(b) Internal revenue service	64
(c) Postal service	64
(d) Public school system	65
(e) Administration of estate	66
(f) Division of lands	66
23. Courts	67
24. Prosecuting attorney's office	68
25. Police department	69
26. Municipalities	71
27. Audit and disbursement	72
28. Estimate of expenditures for 1906	72
29. Concluding paragraph	73

CANAL ZONE, ISTHMIAN OF PANAMA,
EXECUTIVE OFFICE,
Ancon, November 16, 1905.

SIR: As head of the department of government and sanitation of the Isthmian Canal Commission and as governor of the Canal Zone I have the honor to submit the following report of matters of special interest covering the year ending October 31, 1905:

The reorganization of the Commission, creating the department of government and sanitation to include the government of the Canal Zone, was effective April 1, 1905, when the undersigned was appointed a member of the Commission and head of that department. His jurisdiction is defined by the Executive order of April 1, 1905, which provides that he shall administer and enforce the laws of the Canal Zone, supervise all measures of sanitation within the Zone and the cities of Panama and Colon, act as custodian of supplies required for sanitary purposes, and perform such other duties as he may be charged with from time to time by the Secretary of War.

There has been during the past year marked progress in all branches of the work, and, notwithstanding obstacles of the gravest nature, due to climatic and sanitary conditions, distance from the United States, inadequate and uncertain means of transportation, and repeated changes in personnel, the present situation is gratifying.

Maj. Gen. George W. Davis, U. S. Army, retired, continued to act as governor until May 9, 1905, when he returned to the United States under the instructions of the Secretary of War contained in the following cablegram of May 5, 1905:

In spite of your disinclination to leave at this time, I must issue the order that you turn over control to William C. Gorgas, as acting governor, and that you come by next steamer. Magoon suggests Gorgas as your substitute. I thank you for your efficient efforts to maintain status quo until the new executive committee reaches Isthmus, but your malarial condition makes it necessary for you at once to have change of air after a year's hard and dangerous service. No one who knows as I do your courageous fidelity to duty in the face of all obstacles will attribute any unworthy motive to your coming when it is by my order against your will. You will make this public.

Acting under the above instructions, on May 9, 1905, General Davis turned over to Col. W. C. Gorgas, U. S. Army, the chief sanitary officer of the government of the Canal Zone, the direction of the affairs of the Zone government, and Colonel Gorgas acted as governor until May 25, 1905, when the present governor, who had arrived on the Isthmus on May 24, qualified and assumed the duties of his office.

The undersigned was cordially received and welcomed by the officials and people of Panama, who from the time of his arrival to the present have given every evidence of confidence in the purpose of the United States to be just and generous in its relations with the new Republic. Matters that have come up for discussion between the officials of the Republic and the governor have been dealt with by those officials in a spirit of entire frankness and liberality, and they have at all times manifested a desire to meet the United States half way in their dealings with the Zone government.

There has been developed in the Canal Zone a government which it is believed has the confidence and respect not only of the inhabitants of the Zone, but also of the people and officials of the Republic. Private and public rights have been recognized and protected, and

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constant efforts have been made to show that the government of the Zone is one of law, fixed and definite.

After the publication of the Commission's last report, and before the authority of the Commission to exercise legislative power ceased to exist, laws were passed by the Commission on the subjects of expropriation, municipal taxation, customs, and the administration of the estates of deceased American employees. The civil code and the code of civil procedure in force in Panama at the time of the transfer of the Canal Zone have been translated into English and given as wide distribution as possible. Municipal ordinances on various subjects within the jurisdiction of the municipalities have been enacted, as have also ordinances and regulations adopted by the board of health. An adequate system of accounts and audits has been adopted and is now in force.

Owing to the progress of the work of sanitation and the improvement during the past few months in the conditions of living, difficulty is no longer experienced in procuring a sufficient number of men for the service and in retaining them long enough to train them for thorough and systematic work.

The collector of revenues of the Zone in a recent report states:

Within the last four or five months conditions have so improved on the Isthmus, not only in the matter of the practical extinction of yellow fever and the sanitation of the Zone, but also in the general feeling of confidence which now exists among the employees, that the difficulties pertaining to office routine are now reduced to a minimum.

The interest and spirit of cooperation of the employees on the Isthmus are constantly increasing, and it is believed that at present a more conscientious and industrious body of men of the same number could not be found in the United States.

Act No. 8, Laws of the Canal Zone, established the executive branch of the Canal Zone government, created the office of governor, and provided for the following departments:

The executive office.

The department of health.

The department of revenues.

The department of justice.

The department of police and prisons.

The office of the treasurer of the Canal Zone.

The office of the auditor of the Canal Zone.

The work of these departments will be taken up later in this report.

YELLOW FEVER.

The importance of completing the sanitation of the Isthmus of Panama can hardly be exaggerated, for upon it depends not only the construction of the isthmiian canal, but also the utility of the canal when completed and the question as to whether the canal is to be a blessing or an affliction upon the inhabitants of the earth. If yellow fever is not eliminated from the Isthmus, it is probable that the disease will be carried from the canal ports to the ports of the Philippine Islands and those of south China. The lifetime of the yellow-fever-bearing mosquito (*stegomyia*) is about three months, ample time for a ship to reach Asia from the Isthmus of Panama. The *stegomyia* mosquito abounds in the Orient, and climatic and sanitary

conditions there are favorable to the propagation of the disease. Once introduced into the cities and towns of China, the loss of life would be enormous and the effects upon commerce disastrous, while the difficulty of inducing the Chinese and other orientals to adopt modern methods of dealing with the scourge would be insuperable.

From the history of the Isthmus in the past and the experience of the French canal company it was considered probable that the elimination of yellow fever would present difficulties in the construction of the canal no less than those encountered by the engineers. The Isthmian Canal Commission, however, has had one great advantage over the French and others who have employed large bodies of nonimmune laborers on the Isthmus in that recent medical discoveries have made clear the source of yellow-fever infection and indicated the manner in which it may be successfully combated.

During the first ten months of American occupation (from July 1, 1904, to April 30, 1905) there was no alarming outbreak. In the Zone and the cities of Colon and Panama there were during this period but 66 cases of yellow fever, and among the employees of the Commission only 8 deaths. During April, however, the administration building in Panama, in which some 800 nonimmune employees were at work, became infected. Nine cases of yellow fever were reported during the month, and there were 2 deaths. Conditions became worse in May, there being 33 cases and 8 deaths, of which 21 cases and 2 deaths were among the employees of the Commission. A feeling of alarm, almost amounting to panic, spread among the Americans on the Isthmus. Many resigned their positions to return to the United States, while those who remained became possessed with a feeling of lethargy or fatalism resulting from a conviction that no remedy existed for the peril. There was a disposition to partly ignore or openly condemn and abandon all preventive measures.

This was the situation upon the arrival of the present governor on May 24, 1905. The gravity of the crisis was apparent to all, and steps were immediately taken toward the adoption of every possible means for stamping out the disease. The chief sanitary officer was assured that the entire resources of the Isthmian Canal Commission and the government of the Canal Zone were available to assist in the urgent work of stamping out yellow fever on the Isthmus and that money, means, and men to the extent of the Commission's ability would be placed at his disposal.

The plan of campaign adopted consisted in (1) the prevention of the propagation of mosquitoes, (2) the isolation of the persons afflicted with the disease in order to prevent the spread of infection, and (3) the destruction of all mosquitoes capable of transmitting the disease.

To begin with, orders were issued that the screens on the windows in the administration building should be kept closed, and the chiefs of divisions were notified that they would be held responsible for the enforcement of this order. Guards were stationed at the spring-hinged vestibule doors to prevent them from being propped open and to see that persons entering and leaving the building should not loiter on the sill. Arrangements were also made for the thorough fumigation of the building on each alternate Sunday. These precautions, which have continued until the present time, have proved

so successful that although fire buckets filled with water are allowed to stand in the building no mosquito eggs or larvæ are now found in them.

Yellow-fever-bearing (*stegomyia*) mosquitoes do not breed in the open swamps or larger bodies of water, but require the protection of buildings, grass, foliage, etc., and are also incapable of sustained flights for any considerable distances. The danger arises from the mosquitoes bred in and around the houses of the towns. The work of preventing the propagation of these mosquitoes was done by "stegomyia brigades" working under the health officers of Colon and Panama. These towns were divided into districts, and each district was assigned to an inspector, who visits each house once or twice a week in order to see that no mosquito larvæ are breeding on the premises. In the past this work was unusually difficult, owing to the primitive water supply of Panama and Colon, which compelled the inhabitants to rely on water barrels, cisterns, and other small containers for sufficient water for ordinary domestic use. These stagnant tanks offered innumerable breeding places for mosquitoes in every quarter of the city. The efforts of the "stegomyia brigades" were confined for the time being to the covering of all water receptacles with wooden covers or wire netting, in order to exclude mosquitoes from the surface of the water. When the mains from the reservoir which is to supply the city of Panama with water were sufficiently extended into the city to permit the partial use of the new system and the water was turned on, faucets set in the public hydrants in the street corners, and free water supplied to all who came, it became possible to begin the wholesale destruction of water barrels, tanks, and other household water containers and to fill up wells and other underground cisterns. Nineteen-twentieths of these receptacles and breeding places for mosquitoes have now been destroyed, and within a short time it is hoped that the only vessels in which domestic water will be allowed to stand will be the large earthenware jars and coolers in use by the inhabitants of the Isthmus.

The *stegomyia* brigades are also responsible for the oiling of stagnant puddles of water in yards and in the streets, which latter are now badly torn up and poorly drained. Much of this work will become unnecessary in Panama and the sanitary conditions will be greatly improved when the paving of the streets, which is now under way, has been completed.

To prevent the infection of mosquitoes and the consequent spread of yellow fever, it is of the utmost importance that all patients should be isolated as soon as the disease manifests itself. Formerly the sanitary department was dependent for information of new cases upon voluntary declaration or upon the reports of laborers of the *stegomyia* brigade. In consequence of this imperfect system many cases were never reported and others remained for several days unscreened before they were brought to the notice of the authorities. To remedy this condition, eight local physicians were appointed in Panama and five in Colon, after a conference with the President of the Republic, to act as medical inspectors and to make a daily house to house canvass of the two cities, reporting all suspected cases to the health department. When a patient is found presenting symptoms of the fever, every effort is made to persuade him to allow himself to be taken to a hospital of the Commission. If he refuses, or

prefers to remain at home, he is placed under a mosquito bar, the windows of his room are screened, and a double vestibule attached to the door, which is locked and guarded by an attendant instructed to admit only the doctor, nurses, and a limited number of immune relatives or friends. All others are excluded. The fever wards in the hospitals are so carefully screened and so persistently examined and watched that although the doctors and nurses in attendance are usually nonimmunes there has not been a single instance in which fever has been contracted there since the hospital passed under American control eighteen months ago.

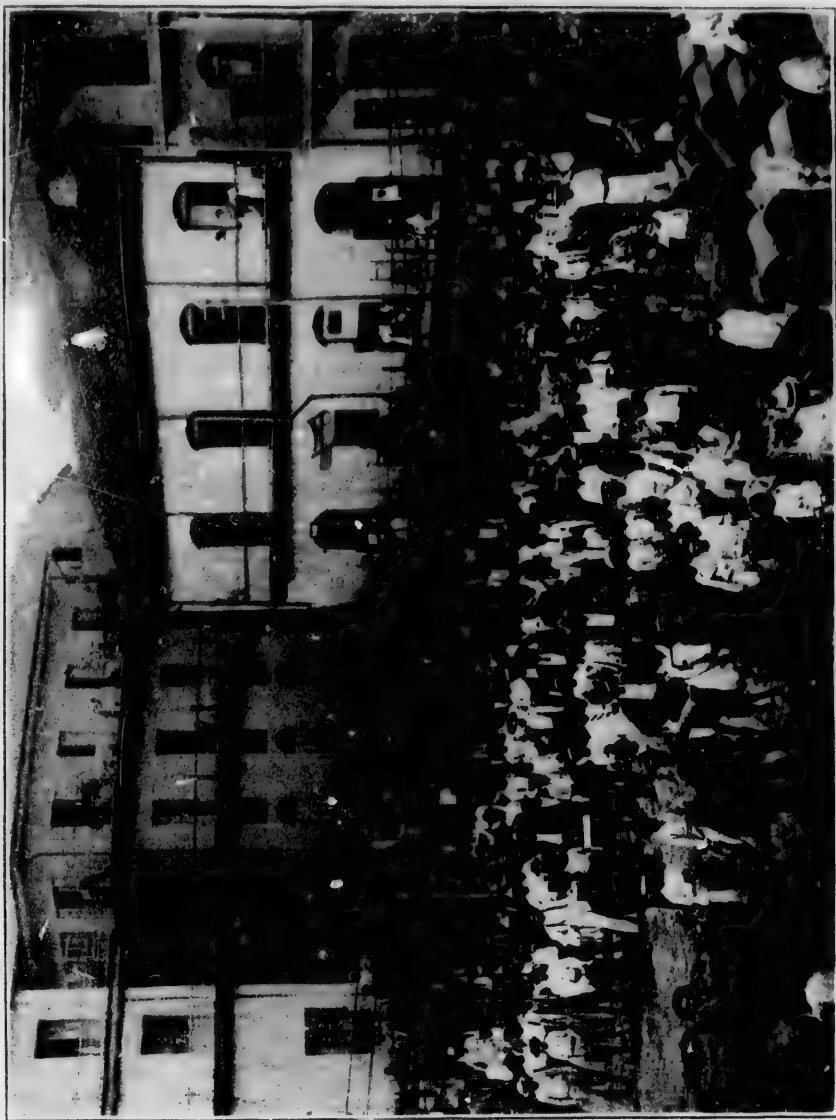
Whenever a fever case is reported the house in which it occurred is immediately fumigated, as is the adjacent property. In addition to this every effort is made to trace the movements of the patient during the days immediately preceding the contraction of the disease, and if it seems probable that he became infected in any other house or building it is also fumigated. This work of tracing the previous movements of patients in order to discover the centers of infection is often hampered by extraordinary difficulties, in overcoming which much ingenuity has been displayed. In one instance a man was reported ill at a hotel where he was registered. When search was made for him he had disappeared. The next day he was found drunk on the street and sent to the hospital, where, after his case had been diagnosed as yellow fever, he became delirious and died. He had stated that he had been at the hotel all the time, but since this house was full of nonimmunes and no other cases appeared there it became evident that he had contracted the fever elsewhere. The man was dead, nobody knew him, and apparently no information was obtainable. It was known, however, that other men of the same nationality as the deceased were in the habit of visiting a certain café. Every one of his countrymen in this establishment was questioned. At last a man was found who stated that he had seen him with an Italian. Then every Italian who could be found in town was interviewed, and finally one was discovered who said he had seen the deceased with the bartender of the theater on two occasions. The bartender was looked for and could not be found. After a hard search he was located the following day. He was in bed and had yellow fever. He stated that the man who died of yellow fever, although registered at the hotel, had been sleeping all the time in the same room as himself in the theater. It appeared probable that the theater had been the center of infection, and it was accordingly fumigated. A few days later a third case was discovered, that of a little girl, who had been in the theater every evening with her mother, thus confirming the indications which had already been acted upon. No other cases appeared. It will be seen from this instance with what persistency and care slight indications have been followed out and new foci of infection discovered and the disease stamped out before it had assumed serious proportions.

The following is the usual method of fumigation: The occupants of the house are given a few days' previous notice, and then at the appointed time a brigade in charge of an inspector makes the house as nearly smoke proof as possible. All cracks and openings in the building are sealed with strips or sheets of paper of sufficient size, attached with paste. Iron pots on brick supports containing pyrethrum powder

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or sulphur are placed in each room, ignited, and left to smolder from two to four hours. The doors and windows are then opened, and as soon as the smoke has cleared sufficiently for the laborers to remain in the house the floors are swept, and the sweepings, containing the dead and stunned mosquitoes, are taken into the street and burned. All paper pasted upon the house is removed, and it is usually left in a much cleaner condition than before the fumigation started.

Sulphur is probably more effective for fumigation work than is pyrethrum powder, but it has the disadvantage of injuring and staining fabrics and corroding metals. Where it is used, it is necessary to remove much of the furniture and hangings, which results in driving mosquitoes into the open air, and thus defeats the purpose of the fumigation. Pyrethrum powder, therefore, although it is not so certainly fatal, is preferable, and it has been generally employed in the work upon the Isthmus.

It became apparent in June that the fumigation of only those houses in which cases of fever had been found or to which they had been traced would not be sufficient to check the epidemic. It was therefore determined to fumigate the entire city of Panama within the shortest possible space of time. Since twelve days must elapse after the stegomyia has bitten a fever patient before it can transmit the disease, it was desired to complete the work within that period, but this proved impossible. The actual time consumed was forty-four days, or from July 7 to August 19. The entire city of Colon was then fumigated in like manner.

The people of Panama, themselves immune to yellow fever, have submitted patiently and uncomplainingly to the annoyance and inconvenience of fumigation. The few complaints which have been made have related rather to the time of fumigation than to the fact of the fumigation itself. Few claims have been filed for compensation for damages resulting from the fumigating work, and almost every one of them has had some basis of merit.

The result of this energetic campaign was a gradual decrease in the number of fever cases, as is shown by the following table:

Month.	Cases.	Deaths.
April	0	2
May	26	8
June	62	19
July	42	13
August	27	9
September	7	4
October	4	2

The value and success of the sanitary work of the health department is also shown by a comparison of the fever statistics of the French canal company with those of the past year. From October 1, 1904, to September 30, 1905, there were 37 deaths from yellow fever among the employees of the Commission. During the same months in 1883 and 1884, when the French had at work approximately the same number of men as the Commission has employed during the past year, they lost from yellow fever 68 men, or almost twice as many. During the whole of the present year, with the possible exception of

June, the yellow-fever statistics have compared favorably with the French averages for the same months, and in most instances the difference in favor of the present régime has been very marked.

There is practically no yellow fever on the Isthmus at the present time, the last case having occurred October 30, but it should not therefore be concluded that the infection has been entirely stamped out. The danger of a recurrence will continue imminent until at least three months have passed without a case. The experience of the past summer shows, however, that should the disease again appear, which is improbable, there is no serious danger of it becoming epidemic.

MALARIA.

Although yellow fever has excited more general alarm than any other disease prevalent upon the Isthmus and has been disastrous in its moral effects, it has impaired the actual physical efficiency of the working force far less than malaria, which, being more familiar and not so generally fatal, is less dreaded. During the four months from May 1 to August 31, 1905, there were but 47 deaths from yellow fever, while the number of deaths from malaria was 108. No statistics are available to show the number of cases of malaria in its various forms, but it is by far the most common of all diseases in the Canal Zone. Moreover, it is not confined, like yellow fever, to immigrants from more temperate climates, but attacks natives and foreigners alike. Experiments conducted at various times and places disclosed the existence of malaria parasites in the blood of from 40 to 70 per cent of the native inhabitants of the Zone.

The propagation of malaria is due to the anopheles mosquito, which breeds in swamps and stagnant pools in the open air. As the area of swamp land in the Zone is very extensive and the rainfall is excessive, the extirpation of this species of mosquito presents difficulties which are not encountered in dealing with the stegomyia or yellow-fever bearing species, which breeds in houses and seldom travels far from its place of origin. On the other hand, medical science possesses in quinine a specific against malaria, of which no counterpart exists in the case of yellow fever. This drug is a deadly poison to the malarial organism, and can be used either as a preventive or as a cure.

Acting upon this knowledge of the manner of propagation of malaria, and the methods of its prevention and cure, the health department has undertaken to destroy as far as possible the breeding places of the anopheles mosquito, and to render the inhabitants of the Zone immune to the disease by encouraging the liberal use of quinine as a prophylactic.

Around each settlement or camp the dense tropical undergrowth has been cleared away, and gangs of machete men, as well as modern mowing machines, are kept constantly at work in keeping the ground bare of tall grass and rank-growing weeds. Many miles of shallow ditches have been dug to carry away the torrential rains and to prevent the formation of swamps and marshes. The larger morasses, which it is impossible to drain, will eventually be filled with the debris from the Culebra cut. In this way the number of mosquitos has been very greatly reduced.

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The employees of the Isthmian Canal Commission have been further protected against anopheles and stegomyia alike by inclosing the houses and office buildings which they occupy with copper gauze netting and by the general distribution of mosquito bars.

New arrivals upon the Isthmus are handed a printed circular explaining the cause of malaria and the means of its prevention, and advising the constant use of quinine in doses of at least three grains a day. All physicians are instructed to give similar advice. Quinine is placed on the table in the dining rooms and boarding camps of the Commission, and large quantities of the drug are distributed by the dispensaries of the health department. In the month of September 675,000 grains were used, most of this for prophylactic purposes.

By these means it has been possible to reduce very greatly the number of malaria cases, and even better results may be expected after a wider area of territory is ditched, cleared, and drained, and the public becomes more impressed with the benefits to be derived from a judicious use of quinine.

BUBONIC PLAGUE.

A most noteworthy achievement of the health department during the past year was the stamping out, in the initial stages, of two outbreaks of the bubonic plague which occurred at La Boca in the months of June and August.

Owing to the wide dissemination of the plague in the ports of western South America having frequent commercial communication with Panama, rigid quarantine regulations were adopted twelve months previous to the first outbreak of the disease on the Isthmus, and have been carefully observed since that time. All ships are disinfected at Callao, under the supervision of an officer of the Public Health and Marine-Hospital Service, for the purpose of killing rats and vermin. All baggage that is regarded with suspicion is disinfected, and the passengers and crew rigidly examined. Persons who present any symptoms of infection are removed from the ship or denied passage. Cargo which is considered dangerous is refused shipment, and if brought to ports on the Isthmus is sent back without being allowed to land. Marine-Hospital Service inspectors travel on the vessels between Callao and Payta, supervising and inspecting the personnel of the ship, and the passengers and cargo taken on at intermediate ports. Finally the ship is again disinfected at Guayaquil under the supervision of an officer of the Service, and on arrival here the vessel is subjected to a rigid inspection, at times redinfected, and all passengers who have not completed the period of incubation of plague and yellow fever are held in quarantine until such period elapses.

In spite of these preventive measures, on June 20 a negro laborer, employed in the handling of freight on the wharf at La Boca, who had been taken sick on June 15 and treated in barracks for five days, was admitted to Ancon Hospital with symptoms of plague. He died on June 23, the autopsy and inoculation experiments confirming the suspicion that the cause of his death was plague. Subsequent investigation disclosed the fact that the rats of the La Boca wharf were infected, and it is probable that the patient contracted the disease

either by contact with dead rats, by handling infected cargo, or by walking with bare feet over a portion of the wharf which the sick and dead rats had infected.

Energetic measures were at once initiated to prevent the spread of the disease. On June 24 the freight wharf was placed under quarantine and thoroughly disinfected. The office building on the wharf was fumigated to destroy the vermin, and washed down with a solution of bichloride of mercury. The house in the camp from which the case was removed and the adjacent buildings were disinfected in a similar manner during the same day, and 100 rat traps and poison were placed on the wharf and the two vessels alongside. On June 25 these two ships were remanded down the bay and fumigated.

On June 26, arrangements having been completed to feed and quarter the laborers at La Boca, the governor issued the following proclamation:

In view of the presence of a suspected case of bubonic plague at La Boca, a quarantine against said town is hereby declared to take effect June 26, 1905. All communication with said town, except such as may be ordered by the sanitary officer in charge, is hereby prohibited. Any person violating the provisions of this ordinance is guilty of a misdemeanor, as prescribed in section No. 279 of the Laws of the Canal Zone, and upon conviction thereof shall be liable to a fine of not more than \$25 gold, or confinement in jail for a term of thirty days, or both fine and imprisonment, at the discretion of the municipal judge. The police force of the Zone will give the necessary assistance to carry out the provisions of this ordinance.

The quarantine was rigidly enforced by a double police cordon on land and water. The work of disinfection was prosecuted with vigor, and all the painters, carpenters, and stragglers were put to work in fumigation squads. The plan of disinfection was uniform, and consisted in a preliminary fumigation with sulphur gas for six hours for the purpose of killing vermin, and in a thorough cleansing of the floors, walls, and ceilings with a solution of bichloride of mercury, applied by means of a force pump. All soiled clothing and dirty bedding found in the houses were dipped and thoroughly wetted with this solution and placed in the sun to dry. The measures in the camp where the contract laborers lived, and from which the case was taken, and the adjacent houses, were even more drastic, as all clothing and bedding was thoroughly wetted with bichloride solution irrespective of condition. All these houses, as well as the wharf, were redisinfecting every seven days. In the meantime the campaign against rats was prosecuted vigorously, and certain employees were designated for this special work.

The disinfection of all the houses of the camp and of the section adjacent, 53 in number, was completed at noon June 29, and work was immediately started on the village proper. Every house and structure in La Boca had been thoroughly disinfected, and some of them redisinfecting, by the night of July 1.

Upon completion of the disinfection, the premises in and around all the buildings in the town were thoroughly cleaned, all rubbish and garbage carted away, and large quantities of carbolic acid and chlorinated lime distributed under the houses, in damp places, and drains. All coops for fowls and animals, and small outbuildings erected as annexes to the houses, were torn down and burned. Platforms and board walks were torn up and replaced, so elevated from the ground as not to be a harboring and nesting place for rats and

mice. All tall grass and weeds were removed from the yards, and the drains were opened.

On July 15, fourteen days having elapsed since every structure in the town had been disinfected and no new or suspicious case having occurred, the quarantine was removed.

The expense of the sanitary work at La Boca, including materials used, the wages of laborers, and subsistence furnished persons detained in quarantine, was \$4,361. The work of the different departments went on as usual, and the Government sustained no loss by closure of the machine shops or interference with other work.

Coincident with the work at La Boca, the chief sanitary officer was authorized to establish in the city of Panama a station for the collection of rats and mice, to be paid for at the rate of 10 cents silver per head prior to July 8, and 20 cents silver per head subsequent to that date.

No new case of the plague appeared until August 24. On that date a laborer from the Barbados employed in the lumber yard at La Boca and quartered in barracks near Ancon was admitted to the hospital with suspicious symptoms. The case was diagnosed as plague by the superintendent of Ancon Hospital and by the director of hospitals. The patient was isolated and died in the early morning of the 26th of August. The autopsy and bacteriological examination, the results of which were submitted to the board for diagnosing contagious diseases, verified the clinical diagnosis, and the case was officially reported on August 29.

The occurrence of this case of plague was a surprise, as more than two months had elapsed since the first case and more than a month since the town had been thoroughly disinfected and cleaned and no further cases of the disease were expected. The exact manner in which this man contracted infection can not be definitely determined. There were employed on the wharf and living in the camp more than 300 laborers, who had been continuously working there since the quarantine previously instituted had been removed and the wharf and town considered free from infection. None of these men had been sick with any symptoms suspicious of plague, and the history of the second case shows that the man had not worked on the wharf or slept in the camp where the first case occurred, but had only taken his meals in the latter place. It may have been that some rat had escaped destruction during the first quarantine, although they were thoroughly eliminated on the wharf and in the camp and village and had been kept practically exterminated by constant vigilance with traps and poison. Possibly fleas in the soil under the barracks, where the laborers often lay during the noon hour to rest, may have been the cause.

From consideration of the foregoing facts it was believed that if infection existed it must have been extremely limited in extent, and it was therefore deemed necessary only to quarantine the wharf, the camps, and the laborers with whom the man had been in contact. The quarantine was not extended to the town proper or to the machine shops of the Isthmian Canal Commission.

Approximately the same methods of fumigation and disinfection were adopted as in the case of the previous outbreak, except that they were confined to a more limited area. The laborers working on the dock were retained there, and those quartered in the barracks at

Ancon, where the case had occurred, went and returned from their work under guard for eight days, the incubation period of the plague. A detention camp was established, where all cases exhibiting symptoms of plague might be detained for a few days before being admitted to Ancon Hospital. On August 30 the three buildings where the last case of plague occurred were burned to the ground. Arrangements were made to quarter temporarily in tents the laborers who had been using these buildings as barracks, and every effort was made to hasten the building of permanent laborers' quarters at La Boca.

One unfortunate result of the outbreak of the plague at La Boca was the temporary congestion of freight in transit across the Isthmus. This was not due to the fact that La Boca was placed under quarantine, because it was possible to handle freight by lighters from the American wharf at Panama, and a great deal of the through traffic was so handled, but the congestion was the effect of the quarantine which the countries of South and Central America declared against the Isthmus. As the steamship companies were not permitted to land cargoes at the ports of these countries, they refused to accept them at Panama, and freight was temporarily held up there, at Colon, and finally at New York. No action which the health department of the Canal Zone might have taken would have remedied this inconvenience in the least, and no remedy existed, except to await the time when the countries in question should see fit to raise the quarantine.

In transmitting the report of the chief quarantine officer of the Canal Zone on the plague, the chief sanitary officer says:

This work I consider quite a brilliant piece of sanitary success. I do not know anywhere in the history of plague infection any instance where sanitary measures have been taken with such success, and I would like to take this occasion to express my appreciation of the wisdom with which the sanitary measures were thought out and the energy with which they were carried into effect.

SANITATION OF THE ISTHMIAN CANAL.

The construction of the isthmian canal depends upon so maintaining the health and comfort of our working forces as to secure a high grade of efficiency. The French company was obliged to suspend operations at two periods by reason of the ravages of disease. The necessities of the situation require that the Commission provide for the employees pure water; good food, properly prepared and regularly served; adequate living quarters, affording proper air space and constructed with due regard to tropical conditions, climatic and otherwise; and the best hospital service and medical treatment known to modern science. The cities of Panama and Colon and the towns of the Canal Zone must be graded and drained and provided with waterworks, sewers, and other public utilities prescribed by modern thought as essential to public health and comfort; sanitary and building regulations must be enacted and enforced. Panama and Colon are adjacent to the line of the canal and (territorially) within the Zone. They are not within the jurisdiction of the Zone authorities, but disease does not observe the imaginary lines of jurisdictional demarcation. Both these cities and the town of La Boca are at tide level and until the canal construction was taken over by the United States were practically without public utilities. The cities of Panama and Colon must be paved. Outside of the cities the

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RESERVOIR DAM FOR PANAMA WATER SUPPLY.

marshes adjacent to the towns and camps must be filled or drained. Panama stands on a spit of land jutting out into the ocean from a peninsula. Ancon Mountain rises from the center of the peninsula. To the north of Ancon at a distance of about 2 miles is the mouth of the Rio Grande, the Pacific entrance to the canal; on either side of the river is a swamp, or "manglares," in area roughly estimated 2 miles wide and 5 miles long. Necessarily the construction of the canal will require this area to be filled with earth or flooded with water. A small per cent of the material excavated from the prism of the canal will fill all the marshes, or "manglares," within reasonable distance from the inhabited portions of the Zone, and as the question of securing dumping ground will be a serious one, unless the excavated material is put in barges and taken out to sea, the expense of filling these marshes will be practically insignificant.

This sanitary work must be undertaken, not as an act of magnanimity to the inhabitants, but as a necessary means of accomplishing the purposes of the United States on the Isthmus. The United States, by virtue of its ownership of the Panama Railroad, has the proprietary title to a large amount of real estate in Panama, Colon, and La Boca, and by the increase of value resulting from these public improvements will be greatly benefited financially. Moreover, under the terms of the treaty the United States is to be reimbursed for the expenses of constructing the waterworks and sewer systems of Panama and Colon.

WATER SUPPLY.

The distance across the Isthmus, following the line of the Panama Railroad, is 47.65 miles. Along the line of the canal and railroad, including Panama and Colon, are 27 towns and a varying number of camps. The total population is estimated to be 50,000.

To secure an adequate supply of pure water the plan adopted is to create lakes by damming the headwaters of streams at convenient localities sufficiently remote from the towns to be free from contamination and to pipe the water into the towns and camps. Each lake will contain sufficient water to supply several towns or camps. These several separate plants will constitute a system extending practically from ocean to ocean and supplying the Zone with pure water for domestic purposes and fire protection. Sites have been selected and the work is rapidly progressing at Panama (Rio Grande), Culebra, Empire, Las Cascadas, Gorgona, Tabernilla (Rio Frijoles), and Cristobal-Colon (Mount Hope).

By tapping the main conducting the water from the Rio Grande to Panama water is now supplied to the following towns: Ancon (the American settlement in the suburbs of Panama), Ancon Hospital, La Boca, Corozal, Pedro Miguel, and Paraiso. To supply Ancon Hospital 1,975 linear feet of pipe of all sizes have been laid, being about 30 per cent of the amount required. For La Boca about 1,000 linear feet were laid, connecting the Panama main with the old pipes and furnishing an abundant supply. For Corozal 3,600 linear feet have been laid, sufficient for present requirements; for Pedro Miguel, 1,650 linear feet, sufficient for present requirements; for Paraiso, 500 linear feet of pipe, sufficient to bring the water into the town.

The water for Culebra is also secured from the Rio Grande Lake,

and for this purpose 11,375 linear feet of pipe have been laid and 47 house connections made. The water is passed through sterilizers before delivery. The permanent supply will be taken in part from a lake formed by placing a dam in the Comacho River. About 50 acres of ground will be flooded, of which 25 acres has been cleared. The work on the dam is progressing rapidly, as is also the excavation and grading for the reservoir.

The present water supply for Empire is derived from a stream about a mile from the town. The water is pumped into a 3,000-gallon tank, from which delivery is made through 1,600 feet of pipe, enough for present needs. Twenty-seven houses are connected. The water, after being pumped into the tank, is passed through an autoclave, under pressure, and after being sterilized is delivered to the consumer. The permanent water supply will be delivered from the Comacho Lake when the dam is completed.

The town of Bas Obispo is occupied as a camp for a detachment of United States marines stationed on the Zone. Water is derived from two small streams flowing into a reservoir. The water is pumped from the reservoir into a receiver in the marine camp, and from this is passed through sterilizers before being used by the men.

At Gorgona water is derived from a reservoir formed by a dam in a stream which flows through the town. The work on the reservoir excavation is completed, 10,038 linear feet of water pipe laid, and 11 house connections established.

Water for Las Cascadas is derived from a small stream which flows through a portion of the village. This stream is regularly patrolled by two watchmen and kept under observation by the police and sanitary inspectors to prevent the deposit of foreign matter. The old French pumping station has been overhauled and made fit for service, 3,000 feet of pipe have been relaid, and the work necessary to meet present needs is completed.

Colon and Cristobal are practically one town, and the water supply and distribution will be common to both. The Panama Railroad Company installed a system of water distribution with a reservoir at Mount Hope, a distance of about 2 miles from town. This system is inadequate both as to volume of water and means of distribution. Wells are impossible in either town, as the water is brackish. During the last dry season much suffering was occasioned the inhabitants by failure of water supply. To prevent a recurrence of such shortage the forces engaged on the Colon water supply have been at work constructing a temporary dam at Brazos Brook and connecting the reservoir so formed with the old one. This will insure sufficient water until the permanent reservoir is completed, and as the temporary plant can be incorporated into the permanent system no labor is lost. All material required has been ordered, and deliveries will soon be made for the permanent system. Quarters for the engineers, foremen, and 200 laborers have been erected at Mount Hope, and work on the permanent water system will soon be under way. At Cristobal 5,850 linear feet of water pipe have been laid and present needs provided for.

In Panama an excellent system of water supply is rapidly approaching completion. A lake, about 10 miles from the city, formed by erecting a dam across the headwaters of the Rio Grande, furnishes an abundant supply of excellent water and affords more

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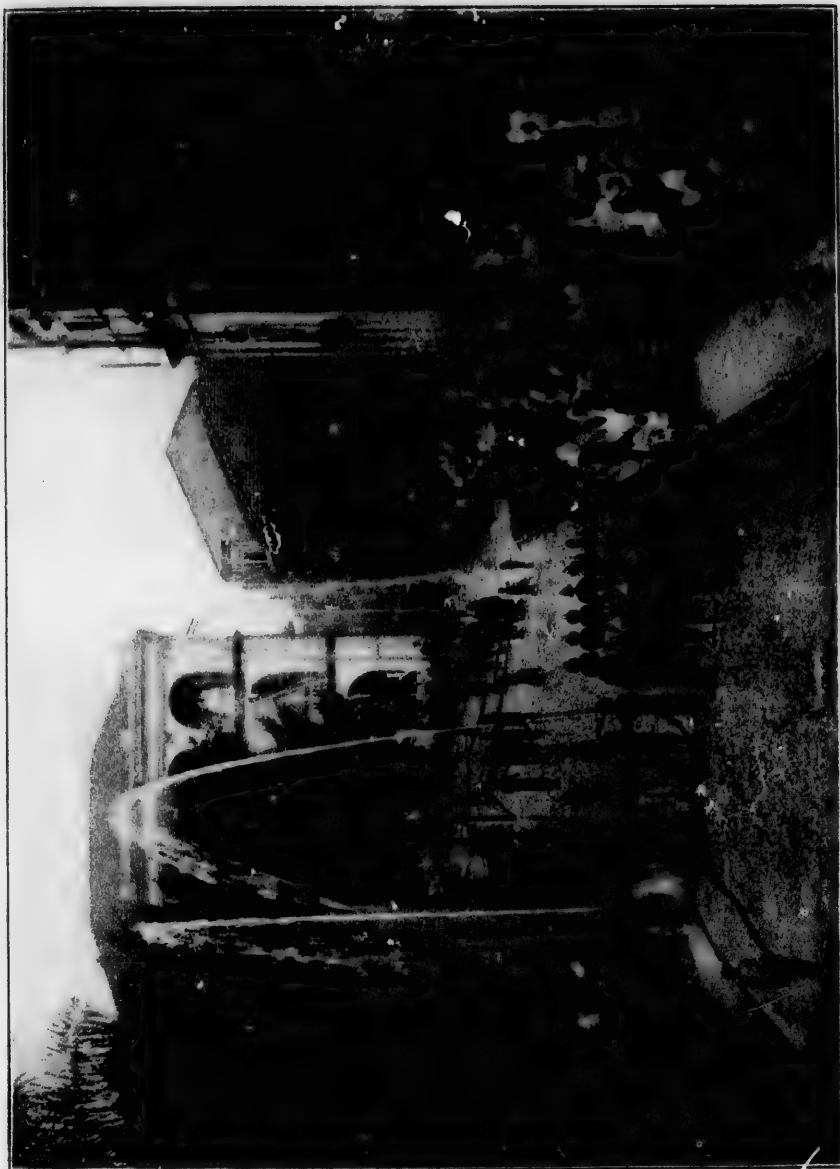
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OPENING OF PANAMA WATERWORKS SYSTEM JULY 4, 1905. IN FRONT OF CATHEDRAL.

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pressure for use at fires than necessity requires. A reservoir of 1,000,000 gallons capacity is situated near the outskirts of the town for use in an emergency. The principal street mains in the inhabited portions of the city are all laid; several mains in the outskirts, intended for use as the town grows, are not laid, but the work will continue until the system is completed. Of the street mains 53.5 per cent are now in place and the water turned on. The lateral pipes for house connections are being laid to the curb line, at an average distance apart of about 25 feet. Of these pipes 10 per cent are in place.

The system has been in use for the past four months, supplying an abundance of pure water, free of charge, to those portions of the city adjacent to the mains. The work of installing water pipes in the houses is progressing as rapidly as possible under existing conditions. Meanwhile faucets are placed in each hydrant when set and the public permitted to use the water.

The water was turned on for the first time on July 4 of this year. It would be difficult to describe the gratification and gratitude of the inhabitants at the consummation of their long-deferred hope. Formal expression took the form of a special session of the municipal council and the adoption of resolutions of thanks and the appointment of a committee to present a copy thereof to the governor of the Zone. The Te Deum was sung in the cathedral, attended by President Amador and his cabinet and the principal officials of the Commission on the Isthmus and of the government of the Canal Zone.

In order to ascertain the quality of the water supplied from these reservoirs, chemical analyses have been made by Dr. Arthur I. Kendall, acting chief of laboratory, Ancon Hospital, resulting in a showing that the water is of good quality, but, owing to the watersheds being covered with tropical growth, vegetable matter is found. The entire elimination of foreign organisms will require the installation of filtration plants and the use of sterilizers, and these will be supplied. Doctor Kendall reports that "the character of the water, as shown by bacterial analyses, is much better than it was under the old system, in which well and spring water was used."

In addition to the benefits ordinarily derived from an abundant supply of pure water distributed through closed pipes, consideration must be given to the great benefits and protection to the public health accruing when the situation will permit the government of the Canal Zone to fill up the open, shallow wells and pools and complete the destruction of the cisterns, rain barrels, and other household water containers now in use in the cities of Panama and Colon and the towns of the Zone. These water containers are the favorite breeding places and the source whence come by far the largest number of yellow-fever-bearing mosquitoes (*stegomyia*). Eliminate these breeding places and the danger from disease communicated by these insects is reduced to a minimum.

SEWERS.

The sewer systems of the Zone and the cities of Panama and Cristobal-Colon will be constructed in accordance with the general plan for the distribution of water, and their construction has kept

pace with that of the waterworks. These systems are now supplemented and will continue to be supplemented by outhouses, portable and stationary, placed over pits. Eventually the sewage of the Zone will be incinerated or otherwise sterilized, and the present work is directed with that end in view.

In Panama nearly all the substantial buildings had drains connected with the old sewers or open ditches. These drains are connected with the new sewer mains as rapidly as laid. Where there are vacant lots or no drainage pipes the house connections are laid to the curb line. The system makes provision for the disposal of storm water and surface drainage, and mains on thirty-one of the principal streets are now in place. Thirty-five per cent of the system is completed. At present the sewers discharge into the waters of Panama Bay, but as soon as the work in the town is completed the discharge pipes will be extended to the deep water outside of the reef at the entrance to the bay.

PAVING.

The sanitation of Panama requires that the streets be paved and guttered, and on May 29, 1905, the Commission authorized the work as a sanitary measure. At the time the United States took over the work of canal construction the city of Panama was paved with cobblestones. The material for the waterworks and sewer systems did not arrive at the Isthmus at the same time, and therefore the streets were dug up two, and in many places three, times in putting down the water mains and sewer pipes and making house connections. A large portion of this work has been done during the rainy season, and the cobblestones have disappeared in a sea of mud. The present condition of the streets defies description, but can be appreciated, doubtless, by any person who has lived in a town in the United States during the distressing times of constructing waterworks, sewers, and pavements.

The city proper will be paved with vitrified brick, surfaced with paving cement. On the streets where heavy traffic is had, the bricks will be set on concrete foundation, and in other portions on sand or crushed rock. The roads in the outskirts will be graded and treated with a combination of crushed rock and clay, known as Telford pavement. Contracts for 7,000,000 vitrified paving bricks have been placed, and about 3,000,000 bricks are now on the Isthmus. The preliminary work of constructing the spur track, platform, storehouse, etc., is completed, the house connections with waterworks and sewer systems on the principal street of the city have been made for about 1 mile, the work of placing the brick on the pavement is begun, and about 1,000 square yards of the street are now covered. The work will be pushed as vigorously as its importance requires.

LA BOCA.

The town of La Boca is situated at the mouth of the Rio Grande River, about 7 miles by water and 3 by land from the city of Panama. A channel has been dredged from the deep water to the piers constructed by the French company and also to the new piers put in by the Commission. This point is the Pacific terminus of the

Panama Railroad, and ships on the Pacific bringing cargo to Panama or engaging in commerce handled by the railway load and unload at La Boca.

Practically all the real estate on which the town stands is owned by the United States. The town is divided into two parts by the railroad tracks and yard. On one side all of the buildings are owned by the United States and on the other nearly all the buildings were erected by private parties on land leased from the old French company. All of the buildings in this town owned by the United States are being overhauled and repaired; several of the more dilapidated were destroyed and in their places have been erected two large and commodious barracks, one for the unmarried and the other for married employees working at this point. Repairs on the old ones have reached such a point that it is proper to say that this portion of the town has been rebuilt, and instead of being a dangerous plague spot the town has now become a model camp, with houses in good repair, freshly painted supplied with electric lights, a water system, and good drainage.

The Commission has monopolized the services of practically all the carpenters and builders on the Isthmus, but as soon as the services of carpenters are available to private parties there is no doubt that steps will be taken to complete the cleaning up and restoration of the buildings owned by private individuals at this point. Something is already being done along this line by private owners, who are stimulated to exertion by the attractive appearance of the houses already repaired. A good road of Telford pavement, constructed by the Commission, connects La Boca with the outskirts of Panama, and when the paving of the streets of Panama is completed easy communication between the two places will be afforded.

COLON.

The sanitation of the city of Colon calls for different measures and presents more difficult problems than the city of Panama, for Panama has natural drainage, while Colon stands on a swamp. The towns of Cristobal and Colon are contiguous. All of the property in Cristobal belongs to the United States, and many of the more important offices of the Commission are established there, and the personnel and many other employees of the Commission reside at this point. Much of the work of the Commission, intended for the permanent sanitation of this locality, has been done at Cristobal, and the streets have been placed in fair condition. The first thing to be done at Colon is to raise the grade by filling the swamp. This must be done either by dirt from Culebra cut or with the material dredged from that portion of the canal in the immediate vicinity. It is practically an impossibility to construct railway tracks in this swamp during the rainy season unless recourse is had to expensive piling, and dredging on the canal at this point has not yet begun. It is probable that the method adopted will be to haul dirt from Culebra or nearby cuts and dump into a water sink and then pump the material into the town and adjacent swamp. It was not considered wise to enter upon this work until the plan of canal was definitely determined and the Atlantic entrance fixed. Should a straightaway entrance be determined upon, it would necessarily be to the westward

of Mindi Point, and consequently a few miles distant from the town. Should the Panama Railroad thereafter move its Atlantic terminus to the canal entrance there would be little, if any, excuse for maintaining the town of Colon at its present location, and should the town grow toward the new location or be removed to that point, the large expenditure necessary to fill, drain, and sewer the present location would be avoided.

The present condition of the streets of Colon is intolerable, and early in September a board was appointed to investigate as to the best means and methods of accomplishing the sanitation of the city and to make a report thereon. This board recommended that as a means of affording temporary relief the streets of the city be filled in with crushed rock and gravel, at an expense of \$10,000; that a large ditch be dug along D street, the central street of the town, connected at either end with the sea; that 7,000 feet of earth ditches and 8,000 feet of concrete ditches be dug connecting with the main ditch. The plan was approved by the chief engineer and the expenditure authorized by the governor, pursuant to resolution of the Commission, and the work is now in progress. While the final purpose of this plan is to afford temporary relief, the work performed under it will be essential to any permanent plan that may be hereafter adopted.

LIVING QUARTERS.

Living quarters for the American employees, on what is known as the "gold roll," are provided by utilizing such of the old houses taken over from the French company as are so situated as to be available and the construction of dormitories, or "hotels," and new houses. The small houses are used for married quarters and the dormitories for bachelors. Two dormitories have been erected, one at Corozal and one at Culebra. A third is now in process of erection at Ancon, intended for the use of employees now living in private quarters in Panama and the overflow from Corozal. The dormitory plan is probably the more economical, but there is the danger of fire rendering a large number of employees homeless, and the increased hazard from infectious or contagious diseases, and the present intention is to meet future requirements by erecting dwelling houses. The purchase from the French company included 1,588 dwellings. They were in bad state of repair and nearly all of them unfit for occupancy. The delay in the delivery of lumber of the required sizes and the difficulty of securing carpenters and other builders made it impossible to repair any considerable number until recently, but the work is now being pushed vigorously, and in a short time all of these houses conveniently situated to the work will be repaired and occupied.

Quarters are assigned to individual employees on the gold roll under the following regulations:

For each dollar of monthly salary, 1 square foot of floor space.

Rooms containing less than 64 square feet, or space used as hallways, bath, water-closets, or kitchen, will not be included.

Men whose rating is on an hourly basis to be considered as working 208 hours per month.

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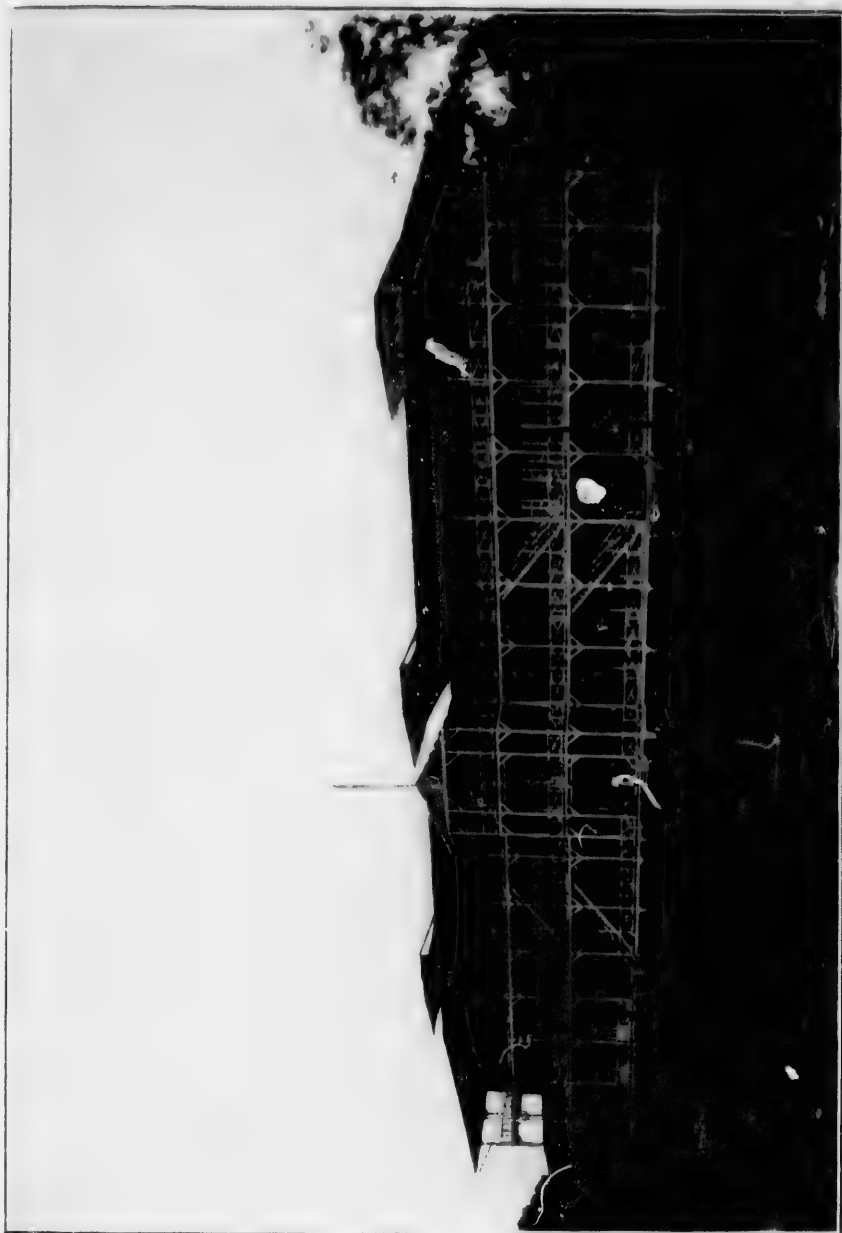
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Dependent members of the families of employees to be assigned space on basis of a percentage of that to which the head of a family is entitled:

	Per cent.
Wife	100
Children (for each year of age)	5
Other relative adults	75
Other adults (includes white servants)	50

For native or colored servants no allowance will be made. They must be quartered in such excluded space as is available.

The above does not apply to officers whose remuneration is \$400 per month or over.

It will be necessary to erect barracks for the accommodation of the common laborers or "silver roll" people. During the French régime the common laborers were required, usually, to house themselves, and lived in native huts or "shacks." The result was a decrease in efficiency and an increase in disease, which undoubtedly contributed to the disaster in which the French eventually became involved. The American Commission intends to house these people in structures built with due regard to hygiene and tropical conditions. With this end in view the board of health of the government of the Canal Zone, composed of the chief sanitary officer, the director of hospitals, the chief quarantine officer, and the chief sanitary inspector, were asked to prepare and report recommendations for general specifications for barracks suitable for tropical countries. These recommendations were submitted to the bureau of architecture and building of the department of construction and engineering. Slight modifications, to meet a few practical difficulties heretofore encountered by the builders, were made, and the specifications adopted are as follows:

GENERAL SPECIFICATIONS FOR BARRACKS SUITABLE FOR LABORERS.

Site.—Sites will be sufficiently raised above water courses to afford adequate protection from surface drainage, and should, wherever possible, be on the top of the mound.

The following locations should be avoided:

1. Ground at the foot of hills or ravines which receive drainage from higher levels.
2. Ravines which are frequently receptacles for decaying or rank vegetation.
3. Low-lying banks of rivers subject to periodical floods.
4. Marsh lands partially covered by salt or fresh water.

Buildings should be so located as to present the least surface to the more direct rays of the sun. This, however, must be modified on account of prevailing winds and available ground, and wherever these buildings should be located so there will be no interference with the free passage of the wind between them, and the minimum distance between barracks should be 20 feet.

The size of the buildings should generally be 30 by 50 feet, giving a full area of 1,500 square feet.

They should be raised on piers or timber blocking, so as to permit the free circulation of air beneath, and the minimum height above ground of the floor line should not be less than 3 feet.

The ground underneath the building should be graded, or crowned, so that it is not possible for it to hold water, and care should be taken to give free drainage.

The material of the buildings should be wood, and sides should be covered with weatherboarding or shiplapped with light lumber. There should be no inside sheathing.

The roofs should be steep, single, and covered with corrugated iron. The eaves should project 2 feet, and there should be no spouting, but a cement or concrete gutter should be placed around the buildings so as to catch all water from the roof.

Ventilation should be in the wall, consisting of louvers 3 feet from the wall plate down.

The height of the wall should be 12 feet from the floor to the eaves.

There should be doors at each end of the building leading to covered verandas or platforms 8 feet in width.

There should be no ceiling and the door and windows should be screened.

Such a building will provide 60 feet of floor space for each person, counting 25 men to a single barrack.

These specifications will be followed and their observance will reduce to a minimum the discomforts and dangers resulting from the climate. In connection with the provision that each man is to have 6 by 10 feet of floor space attention is called to the fact that the men will sleep on cots, and not on bunks or in tiers. This plan will require practically double the number of buildings that would be needed if the men were permitted to sleep in "double-deckers," but the sanitarians are confident of the necessity of bunks and of the good results to be attained by abandoning the plan of permitting tiers or "double-deckers."

FOOD SUPPLY.

The cost of living upon the Isthmus is not as great as it is commonly supposed. At most of the hotels in Panama the price of board is \$25 a month. It is the quality of the food rather than its price which gives rise to complaint. Such fare as the better class of Americans are accustomed to can not be obtained in Panama at any price, although the hotels of the Commission on the line of the canal endeavor to the best of their ability, and with increasing success, to supply it.

The question of an adequate food supply has presented even greater difficulties in the case of the West Indian laborers than in that of the American employees. Trade in the Canal Zone is confined to a few small grocery and general stores in each village operated by the Chinese. The scanty resources of these dealers were insufficient to meet the demands which were made upon them, owing to the great influx of laborers that followed the resumption of canal operations on a large scale, and provisions of all kinds advanced rapidly in price. In spite of wages, higher than were ever paid before for labor of this class, the men were unable to procure sufficient food. Their low efficiency was attributed by the chief engineer in large part to the lack of proper nourishment.

In order to secure an adequate supply of properly prepared food for the large number of employees the following plan has been adopted:

A central plant is to be established at Cristobal, consisting of an ice plant, cold-storage house, bakery, and laundry, sufficient in size and capacity to provide for present necessities and capable of expansion as additional provision is required. A daily supply train, or supply cars attached to the regular trains, will carry and deliver fresh meats (prepared for cooking), vegetables, bread, laundry, etc., to the several camps and hotels, where such supplies as need to be cooked will be properly cooked and served.

The food supply of the Isthmus accessible to inhabitants of the Zone is inadequate to the needs of the large force of employees. The sources of food supply at the near-by ports can not be depended upon

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the construction of buildings on suitable ground, and insure a proper regard for ventilation, water supply, and sanitation.

Largely as a result of the work of sanitation, and in spite of the presence of large numbers of persons from the Temperate Zone, who are unused to the peculiarities of the climate and especially subject to tropical diseases, the death rate among the employees of the Commission upon the Isthmus during the past year has not exceeded 25 per 1,000.

The custody and maintenance of the cemeteries of the Canal Zone has been transferred by the municipalities and placed under the health department, and their management is now in charge of the sanitary inspectors. This course was made necessary by the lack of uniformity in the management of the various cemeteries, the difficulty of securing proper record of interments, and the want of proper care in their maintenance. Especially is this change of advantage in respect to Mount Hope or Monkey Hill cemetery, near Colon, where persons who die in the city of Colon are buried.

At the foot of Ancon Hill, between Ancon Hospital and the town of La Boca, is a cemetery, recently established, for the burial of bodies of persons who die at the hospital.

HOSPITALS.

The hospital at Ancon passed into the hands of the Isthmian Canal Commission on May 4, 1904, and the smaller establishment at Colon was taken over on September 14, 1904. On October 22, 1904, an emergency hospital was opened at Culebra. The combined capacity of these establishments at the time of the last annual report was less than 400 beds.

During the year the equipment of the hospitals has been greatly improved and extended. Additional space for hospital purposes has been gained at Ancon by clearing wards that were formerly occupied as quarters by employees of the Commission and by hospital attendants. The Colon Hospital has been enlarged by the purchase of several adjacent buildings and the erection of new wards and suitable quarters for orderlies and other employees. It is believed that upon the completion of the construction now in progress these two hospitals will be adequate both in capacity and equipment for the work for which they were intended.

In January a hospital was established in temporary buildings at Miraflores for the care of lepers, the insane, consumptives, and those suffering with other chronic and incurable diseases, in which approximately 80 patients are now under treatment. It is intended ultimately to abandon the present site and to transfer the insane and consumptives to an asylum at Ancon and the lepers to a lazaretto, the location of which has been selected. Buildings for these purposes have been authorized and the plans have been prepared.

In February, 1905, an emergency hospital was established at Gorgona, in which, on September 30, 1905, there were 26 patients undergoing treatment. There is also an emergency hospital at Empire.

Other line hospitals will be established as they are required. In the meantime there is a dispensary in charge of a physician at each camp or settlement on the route of the canal. The sick are promptly visited, and if their condition is such as to require hospital atten-

for constant supply, because it frequently happens that these ports are closed by the local quarantine to ships coming from the Isthmus, or, with equal frequency, the isthmian ports are closed against ships from Central and South America. It is therefore necessary to arrange for a constant supply of food products from the United States to make up for the deficiency on the Isthmus. This has been done by equipping the boats of the Panama Railroad Steamship Line with cold-storage facilities. The central plant at Cristobal is not yet installed, but the contracts for the machinery have been let and the ground is being prepared for the erection of the buildings.

Hotels and boarding camps are maintained and operated by the Commission. The cost of board and room to the gold-roll employees living at the hotels is now 90 cents United States currency per day, and to the common laborers or silver employees living in the boarding camps is 30 cents United States currency per day. The intention is to furnish board at cost, and present prices will probably be increased slightly when the permanent plant is installed, in order to meet the increased cost of operation.

For the benefit of such employees as do not live at the hotels or in boarding camps branch commissaries of the Panama Railroad have been established at several points within the Zone, and the privilege of purchasing supplies from them has been extended to the so-called "silver employees."

DELIMITATION OF THE CANAL ZONE.

In September of 1904 a question arose concerning the exact limits of the respective jurisdictions of the municipal authorities of Ancon and of the city of Panama in the village of Santa Cruz, at the foot of Ancon Hill. The proprietors of canteens near the line of demarcation established by the provisional delimitation agreement of June 16, 1904, were called upon for the payment of licenses by both municipalities, and it became necessary to make an exact survey of the boundary at this point. A line was established and marked with suitable boundary posts by two engineers representing, respectively, the governments of Panama and the Canal Zone, and was accepted as satisfactory by the Panaman Government on December 31, 1904. In similar manner, a survey was made and a provisional boundary was marked through the district known as the "Savanas," adjacent to the city of Panama, in which are situated the country homes of many of the residents of the city, and where there had been the same uncertainty regarding the proper payment of taxes. Subsequently the entire boundary between the Canal Zone and the city of Panama was surveyed and marked with line stakes at its intersection with all streets, highways, and railroad tracks, the engineers submitting their report on February 3, 1905. The boundary established was accepted by the Government of Panama on February 17, 1905. Since it appeared probable that similar differences would arise at other points from time to time in the collection of the revenues, it was decided that the provisional boundaries of the Zone should be surveyed in their entirety, and a joint engineering party has been engaged on that work since April, 1905. The line has already been established through the valley of the Chagres River, and the work is still in

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GENERAL VIEW OF ANCON HOSPITAL.

progress. The permanent boundaries can not, of course, be located until the center line of the canal is definitely fixed.

FOREIGN CONSULS TO THE CANAL ZONE.

With the establishment of the ports of Ancon and Cristobal in the Canal Zone there arose a question as to whether the foreign consuls accredited to the Republic of Panama could properly perform consular duties in connection with the shipping of their respective nations frequenting the canal ports, or whether foreign governments should be invited to establish distinct consulates in the Zone. The government of the Canal Zone in December, 1904, had acceded to the requests of Chile and Peru for the official recognition of consuls from those countries, and the consular officers of other nations accredited to the Republic of Panama were of necessity accorded an informal recognition by the Zone government. This condition continued for several months. The Republic of Panama was opposed to the appointment of separate consuls, and as the question was one of form merely, in which the United States might accede to the wishes of the Republic without sacrificing any material interest, on June 29, 1905, the Department of State issued a circular note to each of the foreign nations, stating that consular officers commissioned to the President of Panama and by him officially recognized might exercise their consular functions within and with reference to the Canal Zone without an exequatur or other recognition from the United States.

BRANCH COMMISSARIES.

The Executive order of January 7, 1905, excluded from the privileges of the Government commissaries in the Canal Zone the ordinary day laborers or silver employees of the Commission in the expectation that these people, who were themselves natives of tropical countries, would be able to secure from the local merchants such food and clothing as they were accustomed to use. It was provided, however, that—

Should it develop hereafter that said merchants charge prices in excess of legitimate profit, or practice other extortion, the United States, for the protection and assistance of all its employees, whether from the Tropical or Temperate Zone, will supply its commissaries with such staple articles as are required and desired by the inhabitants of tropical countries, and permit all its employees and workmen and those of its contractors to avail themselves of the benefits and privileges afforded by said Government commissaries.

In the month of August, 1905, there had arisen the emergency provided for in this order, and in a conference held by the chairman, the chief engineer, and the governor of the Canal Zone it was determined to present the matter to the authorities of the Republic of Panama for the purpose of securing their acquiescence in the plan of establishing branch commissaries along the route of the canal and opening them to all employees on both the gold and silver rolls. A letter was addressed to the President of the Republic of Panama explaining the urgent reasons for this measure and making formal presentation of the proposal. In response thereto Secretary de la Guardia stated that his Government "had no objection to the pro-

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posed measure in view of the circumstances which caused its adoption."

Upon the plan being made public several merchants of the city of Panama and one or two of Colon, who had theretofore enjoyed the monopoly of selling food stuffs, protested against the order. One of the merchants addressed a letter to the governor of the Canal Zone setting forth the objections to the plan, which was published in the local press and immediately provoked much discussion. It was thought wise to fully advise the public in regard to the situation, and the governor accordingly answered the letter, giving copies of his reply to the press. Every newspaper on the Isthmus supported the action of the Commission, as did also an overwhelming majority of the inhabitants. Even among the merchants a considerable party sustained the action, because theretofore the laborers had been required to pay so much for food that they had little left to spend with merchants who dealt in other commodities.

In carrying out the plan every possible safeguard was adopted to confine the commissary privilege to actual employees and to afford the merchants all possible protection of the trade which is legitimately theirs. Among other things, the sale of goods for cash was prohibited and a system of coupons devised which can be secured only from the timekeepers, and in limited amounts.

The merchants finally proposed that the Commission permit these coupons to be accepted by them for goods and redeemed when presented through the banks to the Panama Railroad Company. This proposal was accepted. The merchants also requested the Commission to limit the goods on sale at the commissaries to those properly classed as necessities. The Commission accepted this in principle, but is unable as yet to state with certainty what is and what is not necessary for the comfort and welfare of its employees.

CURRENCY AGREEMENT.

The effect of the agreement of June 20, 1904, negotiated by the Secretary of War, has been to provide a stable currency for the Republic and to afford the Commission a convenient medium for the payment of its laborers. It has accomplished all that was expected of it.

To further insure the ratio between Panama silver and United States gold and provide a reliable supply of silver currency for their respective wants, the Isthmian Canal Commission, the Panama Railroad, and the Republic of Panama entered on April 29 into an agreement with four local banks by which the latter undertook for a term of one year to furnish the Commission, the railroad, and the Republic, on ten days' written notice, with such silver currency as they might require, in exchange for drafts on New York, at the uniform rate of 2 silver pesos for \$1 United States gold. The bankers also agreed to sell drafts on the United States to the Commission, the railroad, and the Republic at the uniform rate of \$1 United States gold for 2 silver pesos and 1 cent Panama currency, and to sell such drafts on New York to the general public at a rate not to exceed 2 silver pesos and 3 cents for each dollar United States currency.

In accordance with this agreement the banks have furnished the Commission from time to time such local currency as it has needed for the payment of its laborers. They experienced increasing difficulty, however, in securing silver coin, one of the banks being at last obliged to cut the rate of exchange on New York to par in order to attract silver to meet the demand of the Commission.

Since the embarrassing monetary situation was entirely due to the scarcity of silver coin, the supply of which was barely adequate to meet the ordinary commercial needs of the country, the banks, after a conference with the governor and the chief engineer on June 10, requested that the executive committee represent the state of affairs to the Government at Washington, in order that the President might call upon the Republic of Panama to issue an additional 1,000,000 silver pesos, in accordance with the terms of the monetary agreement of June 20, 1904.

On June 14 the Republic of Panama authorized the coinage of the amount of currency suggested. The coins were struck at the Philadelphia mint and arrived upon the Isthmus in August, greatly relieving the existing stringency. There are now in circulation 4,000,000 pesos, which it is thought will be sufficient both for the commercial needs of the Republic and the periodical payments of the Commission.

ROAD TO THE SAVANAS.

By the terms of the Executive order of December 3, 1904, the United States undertook to repair and maintain the road from the railroad bridge in the city of Panama through the district known as the Savanas to the boundaries of the Canal Zone, a distance of about 3 miles. Surveys were made and estimates were prepared for this road in the department of construction and engineering, but the actual work has been delayed by negotiations with the Government of Panama and by the difficulties experienced in securing the necessary rock and rock-crushing machinery. Up to the present about 1 mile has been completed. The estimated cost of the entire project is \$38,000 gold.

CARE OF THE INSANE, LEPERS, AND INDIGENT SICK.

At the time the United States assumed the government of the Canal Zone there existed no adequate institution, either in the Canal Zone or in the Republic of Panama, for the care of the insane, lepers, and indigent sick. In the city of Panama there was the hospital of Santo Tomas, with a capacity of 150 beds and an income from various sources amounting to about \$1,500 gold a month, which served in an adequate manner the purposes of a city hospital. Patients were expected to defray the expense of their treatment according to their means. There was also in the same city an almshouse known as the "Asilo de Bolivar," where the indigent sick and those suffering from chronic diseases were cared for as far as the limited equipment of the place would permit. The insane of the Republic were either left to the supervision of relatives or confined in a few rooms of the prison at Panama. Some lepers, but not all of those afflicted with the disease, lived in a collection of hovels on the seashore near Panama, where they eked out a precarious existence in dependence on the con-

tributions of the charitable. The government of the Canal Zone took early steps to confine such insane persons as were found within its jurisdiction, but previous to November of last year no provision had been made for the isolation of the lepers of the Zone.

The necessity of suitably providing for these classes of patients was equally apparent to both governments, and since their respective territories were contiguous, and each desired to practice every possible economy, it seemed advisable to devise some plan for the joint equipment and maintenance of the necessary hospitals. Negotiations culminated in the paragraph of the Taft order of December 3, 1904, which provided that—

The United States will construct, maintain, and conduct a hospital or hospitals, either in the Canal Zone or in the territory of the Republic, at its option, for the treatment of persons insane or afflicted with the disease of leprosy, and indigent sick, and the United States will accept for treatment therein such persons of said classes as the Republic may request, but this order shall not be operative unless, first, the Republic of Panama shall furnish without cost the requisite lands for said purposes if the United States shall locate such hospital or hospitals in the territory of the Republic; and, second, unless the Republic shall contribute and pay to the United States a reasonable daily per capita charge in respect to each patient entering, upon the request of the Republic, to be fixed by the Secretary of War of the United States.

In pursuance of this provision, the government of the Canal Zone has cared for its own lepers and insane and those of the Republic of Panama in a temporary hospital at Miraflores. A permanent insane asylum is in course of construction, and a location has been selected for a lazaretto. The indigent sick of the Republic, other than lepers, insane, and other chronic cases, are taken care of at Ancon and Colon hospitals, but since all of the available space at these hospitals is urgently needed for the exclusive use of the employees of the Commission and the inhabitants of the Zone, and as the expense of caring for indigent patients at Ancon and Colon is much greater than it would be in a hospital maintained for that special purpose, the government of the Canal Zone has actively sought to devise some more suitable means for carrying out the terms of the Taft order. It was suggested that the hospital at Santo Tomas might be repaired to serve as a general public hospital for the inhabitants of the Republic of Panama, strangers, foreign seamen; and the plan proved acceptable to both governments. The negotiations and preparation of plans and estimates, which extended over the greater part of the year, culminated in an agreement approved by the executive committee of the Commission on October 4, 1905, by the terms of which the government of the Canal Zone undertakes to restore and enlarge the hospital of Santo Tomas to a capacity of 300 beds, at an expense not to exceed \$55,000 gold, and to erect and maintain in the Canal Zone an asylum for the insane and a lazaretto for the lepers, which shall receive such patients as are admitted to them by the proper authorities of the Republic of Panama.

As a partial reimbursement for these expenditures for hospital purposes, the Panaman Government agrees to turn over to the disbursing officer of the Isthmian Canal Commission, for the use and benefit of the United States, the sum of \$85,000 silver, appropriated by the National Assembly for the construction and maintenance of hospitals. The Government of Panama furthermore agrees to restore and maintain the "Asilo de Bolivar" hospital, and to accept the

repair of Santo Tomas and the additions thereto, in lieu of a hospital for indigent sick, as provided for in the Taft order. It is further provided that the affairs of the hospital shall be administered by a board of five directors, of whom the President of the Republic shall appoint three and the governor of the Canal Zone shall appoint two. One of the latter shall be the chief sanitary officer of the Canal Zone, who shall be president of the board. The governor of the Canal Zone shall also appoint a superintendent, two internes, and three graduate nurses, whose salaries shall be paid from the canal appropriation. All other expenses of the hospital shall be defrayed either from funds of the institution or by the Panama Government. The household and domestic economy of the hospital shall be in charge of the Sisters of St. Vincent de Paul.

The work on the hospital building has been commenced and carried on as an emergency measure under a resolution of the executive committee dated June 14, 1905, and will be completed in the course of a few months.

The per capita charge for Panaman patients admitted to the hospitals of the Canal Zone has been fixed by the Secretary of War at 30 cents gold, per day, upon the recommendation of the chief sanitary officer.

THE SISTERS OF ST. VINCENT DE PAUL.

Under the French régime sisters of the Order of St. Vincent de Paul acted as nurses in the hospitals of the canal company and maintained an orphan asylum at Ancon. They continued to perform their duties after the hospitals passed into the control of the health department of the government of the Canal Zone; but owing to their ignorance of the English language and of American hospital methods the advisability of employing American trained nurses in their stead became increasingly apparent. An effort was made to secure in the United States sisters of the order with hospital training, but they were not available. Provision was accordingly made for the transfer to an institution in Panama of the orphans in the asylum which the sisters had established, and when American trained nurses had been procured to take their place in the hospitals the sisters removed to other missions of the order in France and in Central and South America, the expense of their transportation being borne by the government of the Canal Zone. In preparing plans for the management of Santo Tomas Hospital the government of the Canal Zone gladly concurred in the wishes of the Republic of Panama that the sisters of St. Vincent de Paul should be assigned to duties at the hospital consistent with the aims of their order.

OFFICE BUILDINGS.

The building in Panama known as the administration building, in which were located the headquarters of the French Canal Company, has proved inadequate for the needs of the different departments of the Commission on the Isthmus. It became necessary in July to move the police department to Ancon, and to transfer the health department to a separate building in the city of Panama. Build-

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ings were also rented in the city and assigned to the bureau of municipal engineering and the storehouses of the health department.

It is intended ultimately to remove all offices from the city of Panama. The headquarters of the chief engineer will be transferred to the neighborhood of the Culebra cut. The department of government and sanitation will be established at Ancon. A resolution of the executive committee adopted on August 2, 1905, authorized the construction there of an administration building containing 70 rooms suitable for offices; but, owing to the pressure of other work, ground has not yet been broken for this building.

EXPROPRIATION PROCEEDINGS.

Since Ancon is to be the seat of the government of the Canal Zone, and the place of residence of a large proportion of the Americans upon the Isthmus, it became necessary, in order to secure land for the erection of additional buildings, that the Commission should institute expropriation proceedings to obtain possession of certain lands lying upon the lower slopes of Ancon Hill, between the hospital and the city of Panama. The properties which it was desired to obtain were the estates known as Santa Rosa and Juan Vasquez, which together include some 35 acres; El Hatillo de Echeves, with an area of $4\frac{1}{2}$ acres, and El Tivoli, which contains about 9 acres.

To assess the value of these lands, a joint commission was appointed in January, 1905, in accordance with articles 6 and 15 of the canal treaty. This commission met in February and assessed the values of Santa Rosa and Juan Vasquez at \$41,790 (gold). Their decision was accepted by the owner of the land, who on March 13 executed a deed conveying the property to the United States. The commission also set a value of \$3,050 (gold) upon the estate known as El Hatillo de Echeves, but the proceedings in regard to this property, and also in regard to El Tivoli, were not carried to completion, since it was impossible to serve personal notice upon the owners, and there was not sufficient time for public advertisement, as required by law.

In view of the failure of the first commission to complete its work, owing to the early return to the United States of the American members, a new commission was appointed in April and directed to proceed with the appraisal of El Tivoli, El Hatillo de Echeves, and a piece of land in the Canal Zone, the property of the city of Panama, known as La Huerta del Peinetero. The value of these properties was assessed at \$9,000 (gold) for El Tivoli, \$3,050 (gold) for El Hatillo de Echeves, and \$1,768 (gold) for La Huerta del Peinetero. The title to one-half of El Tivoli and to El Hatillo de Echeves has already been vested in the United States by voluntary conveyance, and steps are now being taken to secure the conveyance of the titles to the other properties.

MATERIAL PROGRESS IN THE CANAL ZONE.

The abandonment of operations on a large scale by the French company and the political disturbances of the years from 1899 to 1902 exhausted the material resources of the Isthmus. The exodus

of laborers reduced commerce to stagnation, while foraging parties destroyed the few ranches and plantations which formerly existed along the route of the canal, and the clearings were overrun by the jungle. The eighteen months of American occupation, and more especially the last year, have contributed largely to revive the commercial and industrial interests of the Canal Zone and of the two cities of Colon and Panama.

The immigration statistics of the quarantine service show that between November 1, 1904, and September 30, 1905, there was an increase of 15,075 in the population of the Zone and the two terminal Panaman cities. The merchants, especially those dealing in foodstuffs and the necessities of life, have reaped perhaps more than a legitimate share of benefit from the Commission's large monthly expenditures in salaries. Owners of real estate have profited by an increase in rental values. The erection of new buildings on all hands and the repainting and repairing of older houses afford some indication of the general prosperity. The increased activity of trade is shown by the currency famine of the spring and early summer, which necessitated the coinage of 1,000,000 silver pesos in addition to the 3,000,000 pesos and large amount of United States currency already in circulation.

It can scarcely be said that there has been any noticeable revival of agriculture within the Zone, although it may be expected that the high price of foodstuffs will eventually lead to the opening of farms and market gardens. The majority of the inhabitants of the Zone appear to prefer employment on the canal at the relatively high wages rather than to cultivate their lands. It is said that the increased demand which has resulted in an advance of prices has caused a decrease in the actual production of foodstuffs, as the average farm laborer or fisherman is now able to earn enough to satisfy his wants in half the time that was formerly required.

The work of the health department, the building and police regulations enacted by the municipal governments, and the simplification of the tax system have all contributed largely to the material welfare of the inhabitants of the Canal Zone, while the political stability guaranteed by the United States and the certainty that the construction of the interoceanic canal will now be carried to a successful completion give assurance of a prosperous future.

EMPLOYEES.

As the organization of the various departments has proceeded and the scope of the work has been extended, there has been a corresponding increase in the number of employees. In November of last year the Commission's employees on the Isthmus numbered 3,506. At the present time they number approximately 17,000 men.^a Of these, 11,300 are under the department of construction and engineering, 2,600 under the bureau of material and supplies, and 3,050 under the department of government and sanitation. The local auditor has 46 men in his office, and the disbursing officer 21. Of the total number of employees, about 2,750 are carried on the gold rolls and

^a The Panama Railroad Company employs approximately 2,500 men, who are not included in this total.

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14,250 on the silver rolls. The number of white Americans on the Isthmus is estimated at 1,500.^a

The work that has been done to insure that this large number of men shall be properly housed, provided with sufficient food of satisfactory quality, and protected, as far as may be possible, from the effects of the climate and the diseases hitherto prevalent upon the Isthmus is described elsewhere in this report.

It has been the desire of the health department to reduce to a minimum the number of men living in rented rooms in the city of Panama, the main center of yellow-fever infection, and as rapidly as quarters have been completed at Corozal and other points these employees have been removed from the city.

The Commission desires to further in every reasonable way the social interests of its employees and to provide healthful means of recreation and amusement. To this end reading rooms have been established in the hotels at Corozal and Culebra, which are supplied with current newspapers and magazines. The executive committee at its eighteenth meeting authorized the construction of a clubhouse for the organization known as the Cristobal Club, which had already been provided with temporary quarters, and granted an appropriation of \$600 for the purchase of equipment and furniture. A brass band, organized by employees stationed at Cristobal, is being equipped at the expense of the Commission.

Many suggestions have been received and considered with a view to increasing the existing means of recreation and relieving the monotony of life upon the Isthmus; but, owing to the pressure of the work of sanitation and construction, it has been impossible to take action upon them.

The men themselves, without direct aid from the Commission, have formed various organizations to promote their own welfare and social interests. Mess clubs are numerous. Attempts have been made to recruit baseball teams, although the climate is scarcely adapted to outdoor sports. In addition to the Cristobal Club, an international university club has been established in the city of Panama by the joint efforts of American and Panama college men. Masonic and other orders are organizing local lodges.

Employees of the Commission upon the Isthmus receive free medical attendance and care, and are entitled to free transportation to the United States upon completion of a satisfactory term of service. They may be allowed six weeks' annual leave with pay, which is cumulative for two years, and thirty days' annual sick leave. When traveling between the Isthmus and the United States they and the members of their families are entitled to transportation at the reduced rates of \$20 between Colon and New York, \$25 between Colon and

^a There are three means of calculating the number of persons employed by the Isthmian Canal Commission:

1. The figures showing the number of men employed on any one day may be taken.
2. The figures showing the average number of men employed during any one week, arrived at by dividing the total number of hours' work on the time books by 48, may be taken.
3. The figures showing the number of payments made by the disbursing officer for any one pay period may be taken.

These three methods give somewhat different results, which will account for possible discrepancies in figures.

New Orleans, and \$70 between Panama and San Francisco. After two years' service they become eligible, under the civil-service rules, to transfer to the Federal service in the United States.

On May 10, 1905, the executive committee adopted a resolution establishing an eight-hour day for laborers and mechanics, and the pay of such men as were working ten hours a day was increased, in order that they might earn as much under the new schedule as the old.

The relations of the different departments with their employees have been cordial and undisturbed by serious differences. There have been complaints from time to time, which have received due consideration, and if found justified upon investigation proper remedies have been applied. But although often exposed to discomforts and hardships, the men have realized, on the whole, that everything possible was being done to provide for their welfare. The negro laborers, always on the alert for causes for complaint, have at times expressed dissatisfaction at the quality of their food and delays in receiving their pay. In April last, on account of some grievance of this nature, a gang of 150 Jamaicans employed in the laying of water mains and sewers in the city of Panama refused to go to work and became turbulent and threatening. The Panama police interfered, and the affair developed into a street riot, in which 21 negroes were severely clubbed or wounded by bayonet thrusts. There were no fatalities and no one was seriously hurt. In October a shipload of negroes arriving at Colon from Martinique became alarmed and refused to land. They alleged, among other things, that the compulsory vaccination to which they were forced to submit was for the purpose of branding them with an indelible mark in order that they might never escape from the Canal Zone. Every effort was made to persuade them to disembark, but without result, and as the captain of the ship refused to take them back to Martinique they were finally forced ashore by the Panaman and Zone police in the presence and with the consent of the French vice consul. With these two exceptions, which hardly belong in the category of labor troubles, there has been no instance of serious friction between the Commission and its employees.

RELIGIOUS WORK ON THE ISTHMUS.

Churches and missionary societies representing several denominations are engaged in active religious work on the Isthmus.

The inhabitants of the Republic of Panama are, in general, members of the Roman Catholic Church, which maintains a cathedral, four churches, and two chapels in the city of Panama. There is also a Catholic chapel at Ancon Hospital, which was erected by the French, and continued by the United States under a chaplain whose salary is paid by the Commission. At Colon there is a Catholic chapel in a building loaned by the French company, which continues to be devoted to church purposes by permission of the Canal Commission. A new building, constructed through the efforts of the local clergyman, was founded in the month of August. Buildings for Catholic churches, erected by the French company, are located at Gorgona and Empire, in the Canal Zone, where services are held by clergymen who go from Panama for that purpose.

The Church of England has maintained a mission on the Isthmus for twenty-one years, under the jurisdiction of the Bishop of Honduras. The church owns a chapel in Colon, presented by the Panama Railroad Company, and one at Panama, and maintains a clergyman at each place, who conduct services and direct the work of catechists at five points on the line of the canal between Panama and Colon. The denomination also supports schools at several villages upon the Isthmus, the expenses of which are defrayed by fees paid by the parents of the pupils. The congregations are composed principally of negro laborers from Jamaica.

The Wesleyan Methodist Church, through the Wesleyan Methodist Missionary Society and under the immediate direction of the synod of Jamaica, has maintained missions on the Isthmus for about twenty years. There is a clergyman in Panama, with an assistant in Colon, who hold services in those cities and at various intervening points. The members of this church are also for the most part negro laborers.

The Jamaican Missionary Society of the Baptist Church has maintained for five or six years an English clergyman at Culebra, who works among the Jamaican negroes there and at other places in the Canal Zone.

During the suspension of work upon the canal the strength and activity of all the Protestant churches declined, but with the coming of the Americans interest has been renewed and an effort toward religious work on a large scale has developed. Within the year the Missionary Society of the Methodist Episcopal Church, the Home Mission Board of the Southern Baptist Convention, both of the United States, and the Salvation Army have sent representatives to the Isthmus to work among the American and West Indian employees.

There are at present 8 buildings belonging to the Canal Commission which are assigned for church purposes. As soon as it is possible to erect schoolhouses in the Zone those buildings will also be available on Sundays for the holding of religious services.

The Commission has authorized the construction and equipment, at its expense, of buildings on the Canal Zone for the use of the Young Men's Christian Association, but work on these buildings has been postponed until the completion of quarters for employees, which are immediately and urgently needed.

By a resolution of the executive committee, dated October 4, 1905, the governor of the Canal Zone was authorized to appoint two resident chaplains for each of the hospitals established by the Commission at Ancon and Colon, and one each for all other hospitals established within the Canal Zone; and to appoint not to exceed five visiting chaplains to perform such duties in the hospitals as the good of the service might require. The salary of resident chaplains was established at \$1,200 (gold) per annum, with quarters, and the salary of visiting chaplains at \$480 (gold), without quarters.

By authority of this resolution, the governor on October 15, 1905, appointed one visiting and six resident chaplains from among the clergymen and missionaries of the different denominations established upon the Isthmus.

In thus promoting the work of the churches upon the Isthmus, the government of the Canal Zone is actuated by a desire to supply a substitute for the salutary restraints of home, family, and the opinion

of the community, of which its employees are partially deprived, and to give due recognition to an agency the influence of which has been powerful in the maintenance of public morality and good order.

THE EXECUTIVE OFFICE.

The work of the office, which is under the direction of the executive secretary, includes the preparation of the governor's official correspondence and the custody of the general records of the government of the Canal Zone. Cable communications between the Commission's isthmiian officials and the Washington office are also codified and deciphered here.

The executive secretary is authorized by resolution of the executive committee to approve, by direction of the governor, all vouchers, public bills, and pay rolls of the department of government and sanitation the amount of any one of which does not exceed \$100, and in the absence or disability of the governor to approve all such bills, vouchers, and pay rolls irrespective of their amount.

The work of the office has been steadily growing since its organization, and the clerical force has increased from 7 clerks in September, 1904, to 40 at the present time.

The office was divided in June of this year into four divisions, viz: Correspondence, files and records, municipalities, and timekeeping.

Early in the present year the War Department system of briefing and recording letters, and referring them by indorsement, was adopted in the executive office. The system as applied to the work of the Bureau of Insular Affairs in Washington, and thence adopted by the office of administration of the Commission, is followed here, and the files and records are in very satisfactory condition.

In the timekeeping division the personal record of each employee in the department of government and sanitation is kept. All papers showing appointments, transfers, promotions, leaves of absence, transportation on the Isthmus and from the Isthmus, etc., are prepared and handled here.

All pay rolls for the department of government and sanitation, after being prepared in the office where they originate, are sent to the timekeeping division, where they are assembled and checked against the authorities for employment. They are then transmitted to the local auditor. The division has proved a useful training school, from which men may be transferred as timekeepers to the different bureaus of the department of government and sanitation or temporarily detailed to instruct others in the proper methods of keeping time records and preparing pay rolls.

Under the laws of the Canal Zone the governor is given supervision over the municipalities into which the Zone is organized, and the work of the executive office in connection with this supervision is handled in the division of municipalities. The selection of competent persons to act as municipal officers, the examination of projects for municipal improvements, the expenditure of municipal funds, the granting of liquor licenses, and other questions of local policy, are all matters that must be investigated by the chief of this division. Since the assignment to this position of the assistant secretary of the Commission, the progress of the work has been particularly satisfactory.

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HEALTH DEPARTMENT.

The work of the health department during the initial stages of the construction of the canal, some features of which have already been discussed in detail, has been followed with interest and concern, since upon its result depends in a large measure the success or failure of the undertaking.

In November of last year this department employed 643 men. As the supreme importance of efficient sanitary work has become more apparent, constant additions have been made to its equipment and personnel, and it now has a force of 2,500 men.

The organization of the department includes the following bureaus:

- The hospital service.
- The health office of Panama.
- The health office of Colon and Cristobal.
- The sanitary service of the Zone.
- The quarantine service.
- The Ancón laboratory.

SANITARY WORK.

The sanitary work of the health department is carried on under the supervision of the health officers of Panama and Colon and the chief sanitary inspector of the Canal Zone, who have a force of 1,869 men. The work of these officers has been painstaking and thorough. In the cities the sanitary brigades have been engaged in the inspection and fumigation of houses, the removal of garbage and refuse from the yards and streets, the destruction of breeding places for mosquitoes, and the thorough cleaning of the houses and yards of the poorer class of inhabitants, whose standard of living is such that they do not feel called upon to maintain their premises in a sanitary condition of their own accord. More than 3,000 houses were fumigated in Panama and Colon between May 4, 1904, and August 31, 1905, and practically all tanks, wells, and cisterns in both these cities were covered in a manner to prevent the breeding of mosquitoes. In Panama 66 hydrants have been installed on the streets, supplying water to 1,019 houses. This has made it possible to destroy or abolish 4,196 large water containers. The character and extent of the work is shown in greater detail in the monthly reports of the health department.

The work of the sanitary brigades in the Canal Zone has been practically the same as in the cities of Colon and Panama, with the exception that there has been less fumigation, and much work has been done in cutting down and burning the undergrowth and grass in the neighborhood of camps and settlements and in digging trenches and ditches to dispose of the rainfall and to drain swamps and marshes. The effect of this work has been to reduce in large measure the number of anopheles or malaria-bearing mosquitoes and to diminish the frequency of malaria cases in like proportion.

As a sanitary precaution it is required that the board of health shall approve the sites of all buildings to be erected by the Isthmian Canal Commission, and approve the plans before their final adoption. The plans of houses to be erected by private owners are subjected to the same scrutiny. It is hoped that these regulations will prevent



VIEW IN ANCON HOSPITAL GROUNDS.

tion they are carried, without loss of time, in the screened ambulance car operated on the Panama Railroad to the hospital at either end of the line.

Steps have been taken to repair the sanitarium on Taboga Island and to equip it as a hospital, with a capacity of 100 beds. This work is now practically completed, and the hospital is open for the admission of patients. The new hospital will not only provide additional space to be used in case of an epidemic or an unusual increase of sickness, but owing to its situation on an island in the Bay of Panama which has always been free from yellow fever and malaria, it is unusually well adapted to serve as a recuperating station to which convalescents may be sent from other hospitals.

By the enlargement of the hospital of Santo Tomas in the city of Panama the hospitals of the Zone will be relieved of the care of the Panaman and foreign sick, which hitherto, by agreement with the Republic and as a protective sanitary measure to prevent the spread of diseases, the Commission has been obliged to assume.

Approximately 600 persons are now under treatment in the hospitals of the Canal Zone, which could accommodate 900 sick, or 5 per cent of a total force of 18,000. From May 4, 1904, until August 31, 1905, 8,373 patients were admitted, of whom 413 died and 7,442 were discharged. Of the number admitted, 5,376 were canal employees and 1,548 were Americans. The hospital department has upon its rolls a force of 505 employees.

The health department is kept informed of contemplated increases in the force of laborers and employees on the Isthmus, and the hospital equipment will be increased from time to time to keep pace with the growing population which must be provided for.

QUARANTINE SERVICE.

The quarantine service has stations at Ancon and Panama, and Cristobal and Colon, and inspects all vessels arriving at those ports. Passengers and cargo are subjected to careful scrutiny. If contagious diseases exist on board, proper steps are taken to prevent their further spread. If necessary the vessels are fumigated and disinfected, and persons exhibiting suspicious symptoms are detained under observation until the disease develops or the period of its incubation is completed.

The quarantine has been successful in protecting the Isthmus from the diseases prevalent in the ports to the south with which there is frequent commercial communication, except bubonic plague, which was imported from South America, in all probability by infected rats; but although the disease appeared on two occasions at La Boca, it was promptly stamped out by the energetic and intelligent efforts of the quarantine officers, as already described in detail.

LABORATORY OF THE DEPARTMENT OF HEALTH.

Under authority of the Commission a laboratory has been established in the hospital grounds at Ancon.

This institution is not only intended for scientific investigation into the causes and means of transmission of tropical diseases, but also for such investigations as are necessary to make clear problems

VIEW IN ANCON HOSPITAL GROUNDS.

the solution of which is essential to the proper planning and carrying out of sanitary work.

A large number of chemical and bacteriological examinations have been made of the various sources of the water supply of the town and camps. The work of determining the amount of suspended solids, both by volume and weight, in the Chagres River water has been carried out. This data is for the information of the engineering department in calculating the suspension of solid matter in the artificial lake to be constructed in connection with the canal.

Preliminary work has also been done to investigate the cause of yellow fever and the practical points bearing on the question of natural and acquired immunity. Some interesting experiments are being conducted to elucidate these subjects, a report of which will be made in the future.

RESULT OF SANITARY WORK.

The mortality and hospital statistics bear witness to the success of the work of the health department during the year. The constant ineffectiveness from all diseases among the laborers scattered along the canal has at no time been as high as 30 per 1,000. The death rate on the Isthmus for the year has been about 53.78 per 1,000, but among the employees of the Commission the rate of mortality has been only 24.30 per 1,000, which is probably as low as might be reasonably expected among an equal number of men engaged in similar work in any climate.

Comparisons with the records of the French are the best indication of what has been accomplished. In October, 1884, when the French company had on the Isthmus a force of 19,234, it lost 161 men. In October, 1905, the Isthmian Canal Commission and the Panama Railroad Company, employing 19,685 men, lost only 55.

The largest number of deaths during the year attributed to any one disease was due to malarial fever, which claimed 85 victims in the four months from May 1 to August 31, 1905. During the same period there were 54 deaths from consumption, 49 from pneumonia, 47 from yellow fever, 46 from dysentery, and 57 from diarrhea and enteritis. Deaths from any one other cause were not numerous.

The detailed reports of the health department, published monthly, contain much interesting data that it has been impossible to give here.

In view of the gratifying conditions shown by these statistics and the complete success attending the efforts of the health department to check the yellow-fever epidemic of May and June and to arrest in its early stages the outbreak of bubonic plague at La Boca, it may be safely said that the problem of sanitation need no longer be considered a formidable obstacle to the construction of the canal.

The record of the work performed by the chief sanitary officer Col. W. C. Gorgas, U. S. Army, and the members of his staff is more eloquent than any encomium that could be formulated. "Their works do praise them."

REVENUE DEPARTMENT.

Under act 8, Laws of the Isthmian Canal Commission, the department of revenues includes the customs service, the internal-revenue service, and the postal service, and the collector of revenues is

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COLON HOSPITAL—MAIN BUILDING.

officio collector of customs, collector of internal revenues, and director of posts.

The scope of the department was extended in January, 1905, when the collection of rentals derived from leases of buildings and land owned by the United States and situated within the Canal Zone was assigned to the department of revenues, and in February, 1905, when the entire land service of the Canal Zone government was transferred to the department of revenues.

The business of the department was further increased in January, 1905, when the collector of revenues was directed to act as supervisor of public instruction and to organize and maintain an adequate school system in the Canal Zone.

The duties pertaining to the department were again extended by act No. 20 of the Isthmian Canal Commission, enacted March 1, 1905, which provides that the collector of revenues shall take possession of and administer the estates of deceased American employees, not including real estate and not exceeding in value \$500. This act was made retroactive.

The department is organized into seven divisions, as follows:

Division of customs and internal revenues.

Division of posts and correspondence.

Division of lands.

Division of records and personnel.

Division of accounts.

Division of administration of estates.

Division of schools.

CUSTOMS SERVICE.

By proclamation of the President of the United States dated June 24, 1904, the ports of Ancon and Cristobal were opened to the commerce of the world. This proclamation established in the Canal Zone two customs districts—Ancon and Cristobal. On July 2, 1904, the first vessel was entered and cleared by the customs authorities of the Canal Zone, and vessels have been regularly entered and cleared since that date.

By order of the governor of the Canal Zone dated July 15, 1904, no duties, tolls, or fees of any kind have been charged for services rendered vessels entering and clearing at ports of the Canal Zone.

Again, by order of the President dated December 3, 1904, no duties, tolls, or fees upon imports have been collected by the customs authorities of the Canal Zone, but imports not consigned to the Canal Commission arriving at the ports of Ancon and Cristobal have paid the customs duties of the Republic of Panama to the authorities of that Republic.

The ordinary services have been rendered vessels entering and clearing at the port of Ancon, such as boarding, entering and clearing, the filing of manifests, recording of protests, and the usual services to seamen as provided by law.

At the port of Cristobal no vessels have entered or cleared and no services have been rendered to American seamen, for the reason that no dock and harbor facilities have been provided and vessels with cargoes intended for the Canal Zone, which otherwise would have entered at Cristobal, have been obliged to enter at the port of Colon.

Piers have, however, been constructed, additional ones are being erected, and terminal facilities provided as rapidly as possible. In the future the port of Cristobal will be prepared to take care of the Atlantic shipping of the Canal Zone.

The customs authorities of the Canal Zone have enforced the laws of the Republic of Panama against the immigration of Chinese, Syrians, and Turks, and have exercised the necessary supervision over persons of this character arriving in transit.

Plans are now being prepared for the issuance of pilots' licenses for each of the ports of entry and for the appointment at each port of a harbor master to exercise the customary supervision over vessels, superintend the selection of anchorage grounds, and perform the other duties of that office.

INTERNAL-REVENUE SERVICE.

The department of revenues has jurisdiction of all matters pertaining to the collection of internal-revenue taxes in the Canal Zone, the issuance of distillery licenses, and the sale of revenue stamps and stamped paper.

In the absence of other rules and regulations governing the measurement and operation of stills, the general instructions of the President to the Commission through the Secretary of War, dated May 9, 1904, wherein he directed that "the laws of the land with which the inhabitants are familiar and which were in force on February 26, 1904, will continue in force in the Canal Zone * * * until altered or amended," have been considered applicable to the internal-revenue service of the Canal Zone, and the rates of taxation on distilled spirits enforced in the Republic of Panama have been continued in force.

During the year ending October 31, 1905, license taxes for the distillation of rum have been regularly collected from eight distillery plants, aggregating \$5,230.40 (United States currency). Revenue stamps and paper to the amount of \$443.20 were sold during the same period.

POSTAL SERVICE.

During the past year the business of the postal service has steadily increased. Fourteen post-offices have now been opened upon the Isthmus, at the following points: Cristobal, Culebra, Paraiso, Matachin, La Boca, Gatun, Gorgona, Pedro Miguel, Empire, Corozal, Bohio, San Pablo, Tabernilla, and Ancon.

For the convenience of officials and employees in the administration building in Panama an office has also been conducted there in the department of revenues, known as "Station A" of the Ancon post-office.

The post-office at Cristobal has been designated as a foreign exchange office, and Canal Zone mails to and from Jamaica, Barbados, and other West India points, which were formerly sent and received through the New York office, are now handled direct.

The business of the service has become so important and its volume has so extended that the station agents of the Panama Railroad, who formerly acted as postmasters, can no longer give it the proper attention in addition to their duties to the railroad company. As

rapidly as experienced post-office men can be secured the assignments of railroad station agents to post-offices are being canceled and the offices are being placed in charge of persons not only thoroughly reliable and responsible, but who have had previous experience with the duties involved.

During the year the registry system has been introduced and is now in operation in all of the post-offices in the Zone.

Previous to December 12, 1904, the postal service of the Canal Zone was furnished with United States postage stamps, surcharged with the words "Canal Zone, Panama." On and after that date, pursuant to Executive order of December 3, 1904, the use of United States stamps was discontinued, and all mail matter originating in the Canal Zone has borne the stamps of the Republic of Panama, purchased from the Republic at 40 per cent of their face value and properly surcharged by the government of the Canal Zone.

The growth of the postal service since its establishment is indicated by the fact that the sales of postage stamps at Zone post-offices during the month of October, 1904, amounted to \$655.54 United States currency, while the sale of stamps during the month of September, 1905, amounted to the sum of \$1,775.79 United States currency. The sales of stamps, however, convey no adequate idea of the volume of business, since at least 80 per cent of the local mail matter and a large proportion of the foreign mail is carried in franked envelopes, as pertaining to the official business of the Government.

PUBLIC SCHOOL SYSTEM.

Under the provisions of Circular No. 18 of the governor of the Canal Zone, dated January 21, 1905, the collector of revenues was directed, in addition to his other duties, to act as supervisor of public instruction. As a preliminary to the establishment of the public school system in the Canal Zone, a census was taken of all children of school age—that is, between 6 and 16 years—and including data as to their previous education. This census showed that in villages within a radius of $1\frac{1}{2}$ miles from the Panama Railroad there were 1,936 children of school age, of whom 976 were males and 960 females. Of these children 1,045 were between the ages of 6 and 10 years and 891 were between the ages of 11 and 16 years. Of the total number it was ascertained that 893 could both read and write, that 935 could neither read nor write, and that the balance could read but not write.

With this census as a basis for estimates, and allowing to each teacher from 40 to 50 pupils as the maximum that could be easily controlled and instructed, the establishment and equipment of 42 schools was authorized. It was also authorized that in villages where more than one school should be established the school children should be divided into different grades, limiting for the present the number of grades to three. The census report showed that there were already five schools under the jurisdiction of certain municipalities, but that these schools were but poorly equipped with furniture, maps, and books.

In almost every instance where the establishment of schools was recommended there were suitable buildings for this purpose owned

or controlled by the Canal Zone government, which were assigned to that use and ordered repaired and renovated. At Cristobal, where the school census showed a population of 282 children of school age, which will rapidly increase with the incoming population, a new building of at least eight rooms, to be constructed and equipped as a modern schoolhouse, was authorized.

Because of the impossibility of at once establishing the 42 schools it was authorized that two schools in each municipality should be immediately established, the others to follow as rapidly as the buildings can be placed in proper condition.

For the present the ordinary district school curriculum, including reading, writing, arithmetic, and geography, together with some instruction in physiology and hygiene, is deemed sufficient for the educational necessities of the children of the Canal Zone. The question of grammar schools and high schools is not involved in the educational problem at present, but as the pupils progress and develop the need of these schools may become apparent. As far as possible persons already on the Isthmus will be secured as teachers.

The work of repairing the buildings assigned for school purposes is being pushed as rapidly as possible. Requisitions for building equipment and school furniture, text-books, maps, and all other necessary supplies have gone forward. Advertisements for bids on these requisitions have been published, and the purchase of the supplies is now being held in abeyance only until the school buildings are ready.

ADMINISTRATION OF ESTATES.

Under act 24 of the Isthmian Canal Commission, enacted March 1, 1905, providing for an inexpensive method of administering the estates of employees of the Isthmian Canal Commission who are citizens of the United States and who die in the Canal Zone, the collector of revenues is ex officio administrator of estates. Up to and including October 14, 1905, he has taken charge of the effects and taken official action pertaining to the settlement of the estates of 23 deceased employees of the Commission. His accounts as administrator have been closed in 12 of these estates and in 11 cases the proofs of heirship not having been filed or the receipts of heirs at law not having been received final settlement has not yet been reported to the auditor.

DIVISION OF LANDS.

Prior to the transfer to this department of the land service, collection of rents was made by municipal treasurers and Isthmian Canal Commission storekeepers. This method proved unsatisfactory, and accordingly, on March 31, 1905, two land agents were appointed for this purpose. These agents collect land and house rentals, inspect and report from time to time upon the condition of buildings owned by the United States within the Canal Zone, and report any unlawful occupancy of public lands.

At the date of the transfer of the land service to this department there were in effect 1,062 leases. Since that date, to and including September 30, 1905, 160 new leases have been issued and 405 leases have been canceled, leaving in effect at the close of business September 30, 1905, 817 leases.

The total collection of rentals from January 21 to September 30, 1905, inclusive, was \$6,871.53.

Every possible facility is extended persons desiring to lease land for agricultural purposes, and there are at present 376 such leases in force.

On November 1, 1904, there was transferred from the engineering department a competent surveyor for service under the government of the Canal Zone. He was attached to the department of revenues on February 1, 1905, at the time the land service was transferred to that department. In May, 1905, the surveyor, in cooperation with a surveyor representing the Panaman Government, commenced a survey for the purpose of determining the location of the towns and villages in the Canal Zone and the Republic of Panama with reference to the provisional boundaries of the Zone and marking with proper monuments the line as surveyed and located in the valleys of the Chagres, Gatuncillo, and Trinidad rivers.

COURTS.

By act No. 1 of the Laws of the Canal Zone the judicial authority of the Zone government is vested in five municipal courts, three circuit courts, and a supreme court.

The jurisdiction of the municipal courts is practically the same as that of justices of the peace in the United States, including criminal cases in which the punishment may not exceed a fine of \$25 or imprisonment for thirty days, and civil cases, except those involving title to real property in which the amount involved does not exceed \$100.

The circuit courts have general jurisdiction in all cases, civil and criminal, and appellate jurisdiction in cases in which the municipal courts have original jurisdiction.

The supreme court, the justices of which are ex officio judges of the circuit courts, has original jurisdiction to issue writs of mandamus, certiorari, prohibition, habeas corpus, quo warranto, and appellate jurisdiction of all actions brought to it from the circuit courts.

Generally the personnel, proceedings, and accounts of the municipal courts are supervised by the chief of the division of municipalities in the executive office. Considerable difficulty is experienced in securing competent persons to act as municipal judges. A knowledge of both Spanish and English, while not indispensable, is very desirable, as well as practical experience in business affairs, and some knowledge of law. Efforts have been made to secure natives of the Isthmus for these positions, but it has not always been possible to find qualified persons of Panaman nationality.

In the municipal courts during the year ending October 31, 1905, there have been 2,373 persons tried for violation of the laws of the Canal Zone or of municipal ordinances, 79 persons held for trial by the circuit courts, and 358 civil cases tried and disposed of.

Hon. Osceola Kyle, appointed the first judge of the circuit courts of the Canal Zone, resigned on March 23, 1905; under date of February 24, 1905, Hon. H. A. Gudger, formerly American consul-general at Panama, was appointed a member of the supreme court; on

June 1, 1905, Hon. F. Mutis Duran, prominent in Colombian and Panamanian public life, both as a civil and judicial officer, was appointed chief justice of the supreme court, and on June 21, 1905, Hon. Lorin C. Collins, of Chicago, was appointed a justice of the supreme court, thus completing the organization of the judicial system of the Zone.

Since October 1, 1904, there have been 79 criminal cases tried by the circuit courts, resulting in 42 convictions and 37 acquittals. There have been 25 civil cases tried and disposed of in these courts during that time. The supreme court has, up to the present time, since its organization, heard and disposed of but 1 case. This case involved an interpretation of the gambling laws of the Canal Zone, and resulted in the judicial confirmation of the legality of a conviction for violation of the laws against gambling.

As in all Spanish-American countries, land titles on the Isthmus are very uncertain. The United States is especially interested in the question of titles in the Zone, as it will be necessary in the construction of the canal to acquire either by condemnation or purchase large tracts of land. The questions involved in the ownership of these lands can not well be determined administratively, and it was contemplated in the organization of the judiciary of the Zone that the circuit courts should be given jurisdiction to act as land courts.

Judicial determination of the titles of all of the lands within the Zone will not only be of great assistance to the United States, but it will also inaugurate a new era of permanent land tenure in the Zone.

The rules governing procedure in the circuit courts, as adopted by the judges July 5, 1905, are included in the appendix.

THE PROSECUTING ATTORNEY'S OFFICE.

The duties of the prosecuting attorney are defined and prescribed by section 39, act No. 1 of the Laws of the Canal Zone. Practically, his work may be divided into three branches: First, to act as legal adviser to the governor of the Canal Zone; second, to prosecute offenses against the laws of the Canal Zone; third, to investigate and settle claims against the Commission.

As legal adviser to the governor, the prosecuting attorney has, during the past year, negotiated for the purchase of several pieces of property in the Canal Zone needed for governmental purposes. In connection with these negotiations he has investigated the titles and prepared deeds. He has also directed proceedings before the joint board of appraisal appointed under the terms of the canal treaty for the condemnation of property needed in the construction of the canal. As the construction of the canal proceeds and additional land is required in the Canal Zone, this part of the work of the prosecuting attorney's office will grow to large proportions.

Prosecutions for violations of the law in the Canal Zone, in proportion to the population, have been very few. The work of the prosecuting attorney in connection with these matters consists in the examination of papers sent to him by municipal judges in the various municipalities, who act as committing magistrates, and the prosecution of such cases as in his judgment require it.

Various claims have been made against the Commission and the government of the Canal Zone for injury to property in connection



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with the construction of waterworks and sewers in the city of Panama and on the line of the canal, the work of surveyors engaged in canal work of the Zone, fumigation work, and the removal of buildings situated on Government land within the Canal Zone. All negotiations for the settlement of these claims have been conducted by the prosecuting attorney, and all the claims have been satisfactorily adjusted. This work also will assume larger proportions as the operations of the Commission in the work of canal construction expand.

POLICE DEPARTMENT.

On November 1, 1904, the police department consisted of 3 officers, 85 men, a chief clerk, and one assistant. The monthly pay roll aggregated about \$4,000. Owing to the constant increase of population in the Zone it became necessary on April 1, 1905, to increase the force to a maximum strength of 3 officers, 137 men, and a clerical force of 6. On September 12, 1905, it was further increased to a maximum strength of 3 officers, 176 men, and 6 clerks, while the pay roll for September aggregated \$7,374.

The total number of arrests during the year was 2,373, or an average of 200 arrests a month, in a population estimated at 25,000. The number of convictions was 1,573.

The chief of police reports that there is no public gambling in the Canal Zone. There have been but 2 arrests in seventeen months for this crime, with but 1 conviction, and in these instances the promoters of the gambling games were endeavoring to continue their business under a concession issued by the Panaman Government prior to the American occupation.

The most frequent cause of arrest has been drunkenness and disorderly conduct, for which 580 persons were taken into custody by the police during the year. There has been a decrease, however, in arrests for this cause and a corresponding improvement in the public morality since the enactment of laws by the five municipalities, imposing a uniform license of \$600 (gold) per annum upon the sale of alcoholic liquors at retail.

Jails and police stations have been built in the Canal Zone at Ancon, Cristobal, and Culebra. The police station at Ancon is a small wooden structure and is at present inadequate to accommodate the force which it is necessary to keep there, the overflow being cared for in tents. The jail at Cristobal is a brick and cement structure and amply commodious to meet all existing requirements. The Culebra Jail is an excellent building, constructed entirely of heavy timbers, and will accommodate, if necessary, 200 prisoners and 60 policemen.

Orders have been issued for the construction of jails at fourteen other points in the Canal Zone, and these buildings will be erected as soon as the pressure of work in the building department will permit. In the meantime the most suitable buildings obtainable, the property of the Canal Commission, have been reconstructed at small expense and converted temporarily into jails and station houses. In spite of the light construction and unsuitable arrangement of these houses only one prisoner has succeeded in breaking jail.

A site for a penitentiary has been selected at Bohio near a large rock quarry in which the labor of prisoners can be utilized in the

operation of a stone crusher. It has, however, been impossible as yet to erect the necessary buildings. In the meantime the municipal jail at Empire has served temporarily the purpose of a penitentiary. Up to October 25 only 31 criminals had been sentenced to the penitentiary, of whom 15 still remain in confinement. These prisoners have been employed in breaking rock to be used in the construction of the waterworks at Empire. They are fed by contract for the sum of 25 cents (gold) a day and receive three substantial meals. Their clothing is at present furnished through the bureau of material and supplies, but it is intended that eventually they shall manufacture their own clothing, shoes, and hats, raise their own vegetables, and, as far as possible, be made self-supporting.

Instructions have been issued for the installation of an adequate telephone system connecting the various police stations of the Zone with one another and with headquarters. The completion of this work will be of great assistance to the department, which will be enabled to receive prompt reports, keep in close touch with all stations and outposts, and send immediate reinforcements to the scene of disturbances.

For the purpose of maintaining order on the pay cars of the Panama Railroad authority has been given by the Republic of Panama for the stationing of members of the Zone police force on the cars while engaged in paying employees of the railroad in Panama and Colon. Authority has also been given by the Republic to station members of the Zone police force at Colon Hospital for the purpose of maintaining order there, and also for the transportation, by members of the Zone police force, of prisoners in their custody through the city of Panama from one part of the Zone to another.

The relations between the Zone police department and the police of Panama are of the most friendly nature, and, when the occasion offered, every assistance has been rendered by the one to the other. The two departments have cooperated in apprehending criminals, and no difficulties have been experienced in the informal and expeditious extradition of prisoners.

April 1, 1905, the salary of first-class privates was increased to \$900 (gold) a year, thus permitting the appointment to this grade of Americans who can be promoted to corporals after a short period of preliminary training and who are competent to assume charge of a station. Such American policemen as it has been possible to attract to the Isthmus and retain in the service have accomplished all that was expected of them. They are, for the most part, men trained in the Army, who have seen service in Cuba, Porto Rico, or the Philippines, and whose previous experience admirably fits them for the duties of police officers. The Jamaicans and Barbadians who compose the rank and file of the force have proved, in certain respects, better adapted for the performance of their duties than an equal number of white Americans would have been. The population of the Zone consists in large part of negroes from the West Indies. In dealing with these people the American is apt to be aggressive and overbearing, but the colored police officers have shown admirable tact and judgment in dealing with their countrymen. They are clean and neat in person and take great pride in their duty.

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Act No. 13 of the Laws of the Canal Zone requires that the chief of police shall perform the duties of marshal of the supreme and circuit courts. He has accordingly signed and subscribed all official writs, documents, and papers in connection with the duties of the office of marshal; served all warrants, subpoenas, injunctions, and summonses; collected all moneys when ordered to do so by the court, and duly turned them over to the clerk of the court. He has been personally present, or represented by duly authorized deputy, at all sessions of the supreme and circuit courts held in the Canal Zone, and has enforced such orders and processes as the court has directed.

The chief of police also acts as coroner, and in the period from June 30, 1904, to October 25, 1905, he held inquests over 24 bodies.

MUNICIPALITIES.

On October 24, 1904, a legislative enactment of the Isthmian Canal Commission created five municipal districts in the Zone—Ancon, on the Pacific side of the Isthmus; Emperador, in which is the Culebra cut; Gorgona; Buena Vista, and Cristobal, the last named bordering upon the Caribbean Sea.

The total area of these five municipalities may be estimated at 475 square miles, and the total population, including employees and laborers of the Canal Commission, at 25,000.

The officers of the local governments are a mayor, a judge, a secretary, and a treasurer, who are appointed and whose salaries are fixed by the governor of the Canal Zone. Each municipality has a council of five members appointed by the governor of the Canal Zone, upon the recommendation of the mayor, who receive fees for attendance at meetings.

In Gorgona a municipal physician has been appointed, and in all districts such inspectors and clerical assistants have been employed as has proved necessary. The Canal Zone police cooperate with the municipal authorities and perform all the duties of a municipal police force.

Wherever it has been possible to find natives of the Canal Zone of the requisite intelligence and character, speaking both English and Spanish, they have been given the preference in making appointments to the municipal offices.

The municipalities have projected and commenced such public works as the erection of court-houses, market places, slaughterhouses, and public latrines, and have maintained in repair such municipal buildings as existed at the time of their organization. Upon the completion of work now being carried on it is planned to begin the construction of roads and sidewalks, of which there are practically none within the Zone at the present time, and to establish simple systems of public lighting and such other general municipal improvements as the limited revenues will permit.

During the past eleven months the municipal councils have passed ordinances and resolutions regarding the maintenance of public order, the collection and expenditure of the revenues, and local sanitation, which have become laws after approval by the governor of the Canal Zone. These enactments are as nearly uniform as a due regard for the particular needs of each municipality will permit.

On July 1, 1905, most of the municipalities passed an ordinance, which had been pending for several months and which was later adopted by all, imposing a uniform license of \$600 gold on the sale of alcoholic liquors at retail. Under the old law the cheapness of a license, which cost from \$2.50 to \$10 per month, permitted the establishment of innumerable small and disreputable bars, that were the scene of constant disorders, demoralized the laborers of the Commission, and added greatly to the work of the police. The operation of the new law, while reducing the number of bars from 327 to 60, has increased the municipal revenues from this source from \$34,542 silver to \$72,000 silver per annum. The clergymen and missionaries of the Zone have given their earnest approval to the change, and the police have testified to its beneficial effects upon the maintenance of good order and the public peace.

The municipalities formerly maintained a few poorly equipped schools, but the expense and control of public education has now been assumed by the government of the Canal Zone.

The revenues of the municipalities are derived from taxes on real estate, licenses for the conduct of various kinds of business, taxes on the sale of merchandise for consumption, rents and profits from municipal properties, and fines, fees, and costs collected by the municipal judges. For the year ending October 31, 1905, the income from these sources has aggregated \$114,740.18 silver, while the expenditures for the same period have been \$47,486.13 silver, leaving a cash balance on hand of \$67,254.05 silver.

Every reasonable success has attended the efforts of the past year to insure to the inhabitants of the Zone an honest and efficient management of the public business and a wise administration of the laws, and the progress of the local governments has been marked and gratifying.

AUDITS AND DISBURSEMENTS.

Under the provisions of acts Nos. 8 and 20 of the Laws of the Canal Zone, the auditor and the disbursing officer of the Commission on the Isthmus are made, respectively, auditor and treasurer of the Canal Zone. As practically all expenses of the Zone, except those of municipalities, are paid from the canal appropriation, the accounts are audited and disbursements made under the general regulations governing disbursements from the National Treasury. The appendix contains the auditing rules recently prescribed by the Secretary of War, covering the method of accounting and the settlement of accounts of the various Zone officers handling public funds. It contains also a statement of the receipts of Zone revenues. The disbursement from Zone revenues up to October 31, 1905, was \$117.45.

ESTIMATE OF EXPENDITURES.

The appendix includes an estimate of expenditures of the Zone government for the calendar year 1906. This estimate is, of necessity, only approximate. As will appear from a comparison of the tables of personnel and salaries included in the appendix, showing the increase of the force, and also from what is contained in this report showing the development of the work, it is impossible to foresee at

this time the growth of the various branches of the government during the coming year. The expenditures depend upon the number of employees brought to the Isthmus, the success of the health department in keeping out yellow fever, and many other conditions the effect of which can not be determined at this time.

CONCLUSION.

An effort has been made to present in this report, as briefly as possible, the aims and methods of work of the various departments of the government of the Canal Zone, the direction of which was committed to the undersigned by the President's order of April 1, 1905, and, so far as possible, to show the result of that work up to the present time. There are many subjects not mentioned here that require legislative action, and the situation requires the restoration of the legislative power granted by Congress in the act of April 28, 1904.

I should lack both courtesy and candor if I omitted to direct attention to the fact that to the heads of the several departments of the Zone government and to their subordinates is due the credit for the advance in efficiency, organization, and accomplished results recorded in this report. For at least four months these men endured not only the ordinary discomforts of the situation and severities of the climate, but also faced the deadly peril of yellow fever and other tropical diseases. It is a high order of courage that enables men, day after day, for months, to continue the performance of ordinary routine tasks in the presence of a destructive power that is assailing their comrades and associates at a ratio almost as large as that which justifies retreat in battle; and the exhibition of such courage by our countrymen on the Isthmus who stayed and discharged with fidelity the duties they had assumed is worthy of special commendation. While many came to the Isthmus only to return by the next steamer, others remained at their posts, and there is now building up around this nucleus of tried and proven men an efficient and disciplined organization worthy of the great enterprise in which they are engaged.

Respectfully submitted.

CHARLES E. MAGOON,
*Head of the Department of Government and Sanitation
and Governor of the Canal Zone.*

The SECRETARY OF WAR.

APPENDICES TO REPORT OF HEAD OF DEPARTMENT OF GOVERNMENT AND SANITATION.

APPENDIX 1.—STATISTICS—REVENUES AND DISBURSEMENTS.

Table 1.—Statement of the revenues of the government of the Canal Zone to October 31, 1905.

APPENDIX 2.—STATISTICS—FORCE AND PAY ROLLS.

- Table 2.—Classified force and pay roll statement of the department of government and sanitation, by months, for the year ending October 31, 1905.
 Table 3.—Classified force and pay roll statement of the executive office, by months, for the year ending October 31, 1905.
 Table 4.—Classified force and pay roll statement of the health department, by months, for the year ending October 31, 1905.
 Table 5.—Classified force and pay roll statement of the office of the chief sanitary officer, by months, for the year ending October 31, 1905.
 Table 6.—Classified force and pay roll statement of the health offices of Panama, Colon, and the sanitary service of the Canal Zone, by months, for the year ending October 31, 1905.
 Table 7.—Classified force and pay roll statement of the hospitals of the Canal Zone, by months, for the year ending October 31, 1905.
 Table 8.—Classified force and pay roll statement of the quarantine service of the Canal Zone, by months, for the year ending October 31, 1905.
 Table 9.—Classified force and pay roll statement of the department of revenues, by months, for the year ending October 31, 1905.
 Table 10.—Classified force and pay roll statement of the judicial department, by months, for the year ending October 31, 1905.
 Table 11.—Classified force and pay roll statement of the office of the prosecuting attorney from July 1 to October 31, 1905.
 Table 12.—Classified force and pay-roll statement of the police department, by months, for the year ending October 31, 1905.

APPENDIX 3.—SANITARY STATISTICS.

- Table 13.—Work of sanitation in Panama, May 4, 1904, to August 31, 1905.
 Table 14.—Work of sanitation in Colon and Cristobal, July 1, 1904, to August 31, 1905.
 Table 15.—Work of sanitation in Canal Zone, July 1, 1904, to August 31, 1905.
 Table 16.—Quarantine work, July 16, 1904, to August 31, 1905.
 Table 17.—Quarantine work in connection with plague at La Boca.
 Table 18.—Report of hospitals, May 4, 1904, to August 31, 1905.
 Table 19.—Death rate on Isthmus, by months, November, 1904, to October, 1905.
 Table 20.—Yellow-fever statistics, July, 1904, to October, 1905.
 Table 21.—Table showing deaths, by diseases, from May 1, 1905, to October 31, 1905.

APPENDIX 4.—MUNICIPAL STATISTICS.

- Table 22.—Receipts of the municipalities of the Canal Zone, November 1, 1904, to September 30, 1905.
 Table 23.—Disbursements of the municipalities of the Canal Zone, November 1, 1904, to September 30, 1905.

APPENDIX 5.—STATISTICS—DEPARTMENT OF REVENUES.

- Table 24.—Statement of transactions at the port of Ancon, July 2, 1904, to September 30, 1905.
 Table 25.—Statement showing sale of United States surcharged postage stamps, October 1, 1904, to December 11, 1904.
 Table 26.—Statement showing sale of Panama surcharged postage stamps, December 12, 1904, to September 30, 1905.

Table 27.—School census of the Canal Zone.

Table 28.—Abstract of school census and proposed schools.

Table 29.—Operations of land division.

APPENDIX 6.—STATISTICS—CRIMINAL.

Table 30.—Statement of arrests made by the Canal Zone police, November 1, 1904, to October 31, 1905.

APPENDIX 7.

Provisional rules and regulations governing procedure in the courts of the Canal Zone.

APPENDIX 8.

Executive order prescribing an accounting system for the government of the Canal Zone.

APPENDIX 9.

Estimate of expenditures of the department of government and sanitation for the year 1906.

APPENDIX 10.

Officers of the government of the Canal Zone.

APPENDIX 1.—STATISTICS—REVENUES AND DISBURSEMENTS.

TABLE 1.—Statement of Government Canal Zone revenues received from all sources to October 31, 1905.

Date.	Total.	Postal revenue.	Distilling licenses.	Revenue stamps and stamped paper.	Miscellaneous taxes and licenses.	Police department fines.	Court fees and fines.	Quarantine receipts.	Miscellaneous.
1904.									
July	\$367.28		\$41.20		\$326.08				
August	1,737.78	\$355.70	383.59	\$13.27	985.22				
September	1,854.63	497.58	449.83	20.17	887.05				
October	2,153.72	971.08	268.19	21.86	892.59				
November	2,893.14	616.58	761.63	30.49	1,011.96	\$5.75	\$466.73		
December	1,107.42	529.64	558.66	23.12		1.00			
1905.									
January	2,744.68	2,300.95	375.27	27.03		9.93	12.10		\$19.40
February	1,802.75	1,269.50	503.37	24.88	5.00				
March	1,274.04	831.22	367.06	7.26	10.00			\$58.50	
April	1,668.69	1,087.31	400.73	20.93	5.00	14.67	53.25	86.80	
May	2,080.99	1,576.59	354.00	28.20		22.00	93.10	6.50	
June	1,633.93	1,007.50	522.00	22.90	5.00	9.33	12.00	55.20	
July	1,706.14	936.64	661.40	13.10		42.00	4.50	48.50	
August	817.65	222.85	494.00	14.00	5.00	60.00	7.30	14.50	
September	2,568.57	1,102.27	855.00	14.70	5.00	82.00	250.10	59.50	
October ^{a b}	1,651.85	883.20	450.00	7.50	5.00	63.00	208.50	14.65	
Total c	27,842.66	14,188.61	7,440.93	289.41	4,142.90	309.68	1,107.58	344.15	19.40

^a There was charged against postal revenues in August \$1,000 and in September \$710.20, cost of surcharging United States stamps prior to December 12, 1904.

^b In September is included August collections; also receipts for September on an accrued basis, throwing the revenues for the two months in this one month.

^c Out of total revenues the following allotments have been made by the Secretary of War: April 24, 1905, for "Contingent expenses of Zone government," \$500; June 24, 1905, subject to accumulation of sufficient funds, for "school purposes," \$30,000.

REPORT OF THE ISTHMIAN CANAL COMMISSION.

APPENDIX 2.—STATISTICS—FORCE AND PAY ROLLS.

TABLE 2.—Department of government and sanitation—Consolidated report of force October 1, 1904, to October 31, 1905.

Date.	Gold, monthly.	Silver, monthly.	Silver, hourly.	Total employees.	Total salaries and wages.
October.....1904.	216	229	480	925	\$26,102.46
November.....	235	210	525	970	28,446.95
December.....	246	299	546	1,091	81,183.00
January.....1905.	261	299	769	1,329	34,892.45
February.....	265	289	902	1,456	37,268.65
March.....	292	306	891	1,492	43,100.74
April.....	329	327	896	1,552	44,548.80
May.....	350	345	1,196	1,891	51,136.85
June.....	384	377	1,546	2,307	64,885.75
July.....	456	404	1,798	2,718	84,210.69
August.....	517	540	2,180	3,237	97,828.84
September.....	586	581	1,935	3,052	100,067.46
October.....	637	551	1,625	2,812	100,973.57
Total.....					718,033.76

TABLE 3.—Executive office—Consolidated report of force October 1, 1904, to October 31, 1905.

Date.	Gold, monthly.	Silver, hourly.	Total employees.	Total salaries and wages.
October.....1904.	18	15	33	\$2,273.62
November.....	19	17	36	2,531.41
December.....	20	19	39	2,589.76
January.....1905.	21	16	37	2,641.67
February.....	19	9	28	2,264.46
March.....	21	8	29	2,550.55
April.....	24	15	39	3,009.43
May.....	23	17	40	2,779.44
June.....	28	16	44	2,927.59
July.....	33	19	52	5,388.77
August.....	49	22	71	7,965.50
September.....	51	20	71	7,833.71
October.....	48	19	57	7,428.19
Total.....				49,910.48

TABLE 4.—Health Department a—Consolidated report of force October 1, 1904, to October 31, 1905.

Date.	Gold, monthly.	Silver, monthly.	Silver, hourly.	Total employees.	Total salaries and wages.
October.....1904.	92	225	465	782	\$18,212.32
November.....	105	205	508	818	19,679.21
December.....	113	234	527	874	22,080.40
January.....1905.	127	295	753	1,175	25,244.49
February.....	128	283	890	1,301	28,095.35
March.....	148	302	879	1,329	32,544.29
April.....	157	320	876	1,353	32,672.98
May.....	170	338	1,167	1,675	38,588.13
June.....	188	370	1,520	2,078	50,215.16
July.....	256	456	1,769	2,481	66,576.10
August.....	290	532	2,144	2,966	75,825.12
September.....	321	521	1,897	2,739	78,004.26
October.....	338	542	1,595	2,475	77,949.10
Total.....					547,474.59

a Includes chief sanitary office, maritime quarantine service, hospital service, sanitation service.

TABLE 5.—Chief sanitary office—Consolidated report of force October 1, 1904, to October 31, 1905.

Date.	Gold, monthly.	Silver, monthly.	Silver, hourly.	Total employees.	Total salaries and wages.
1904.					
October	5	1		6	\$506.89
November	7			7	672.33
December	8			8	719.40
1905.					
January	8			8	741.00
February	8			8	865.05
March	7			7	773.29
April	9			9	849.62
May	8			8	909.16
June	10			10	1,192.26
July	12			12	1,509.58
August	17	3	2	22	2,225.66
September	21	4	2	27	3,298.91
October	24	5	17	46	3,635.90
Total					17,502.16

TABLE 6.—Sanitation—Consolidated report of force October 1, 1904, to October 31, 1905.

Date.	Gold, monthly.	Silver, monthly.	Silver, hourly.	Total employees.	Total salaries and wages.
1904.					
October	22	20	375	417	\$7,866.32
November	22	27	457	506	8,859.67
December	23	28	437	483	10,258.17
1905.					
January	29	58	665	752	12,259.85
February	30	54	797	881	14,868.31
March	39	62	803	904	18,658.61
April	43	64	815	922	18,812.62
May	47	65	1,112	1,224	28,276.11
June	56	70	1,429	1,555	33,744.67
July	83	104	1,639	1,826	42,630.08
August	101	153	2,059	2,313	50,770.50
September	100	147	1,775	2,022	48,570.39
October	101	146	1,475	1,722	45,317.70
Total					328,021.58

TABLE 7.—Hospitals—Consolidated report of force October 1, 1904, to October 31, 1905.

Date.	Gold, monthly.	Silver, monthly.	Silver, hourly.	Total employees.	Total salaries and wages.
1904.					
October	60	196	90	346	\$9,204.31
November	72	170	51	293	9,581.21
December	78	195	90	363	10,488.88
1905.					
January	86	224	88	398	11,589.98
February	86	213	93	392	11,614.08
March	98	227	76	401	12,866.81
April	101	243	61	405	12,352.68
May	110	261	55	426	13,571.26
June	118	286	58	462	14,491.69
July	152	336	86	574	20,487.52
August	162	353	83	603	21,202.50
September	181	354	120	655	23,984.49
October	195	379	103	677	27,081.88
Total					188,813.03

TABLE 8.—*Maritime quarantine—Consolidated report of force October 1, 1904, to October 31, 1905.*

Date.	Gold, monthly.	Silver, monthly.	Silver, hourly.	Total employees.	Total salaries and wages.
October 1904.	5	8		13	\$854.80
November	4	8		12	536.00
December	4	11		15	614.00
January 1905.	4	13		17	655.66
February	4	16		20	752.91
March	4	13		17	745.53
April	4	13		17	698.16
May	6	12		17	801.00
June	4	14	33	51	746.54
July	9	16	44	69	1,868.92
August	10	16		28	1,626.46
September	19	16		35	2,150.47
October	18	12		30	1,914.12
Total					13,137.82

TABLE 9.—*Revenue Department—Consolidated report of force October 1, 1904, to October 31, 1905.*

Date.	Gold, monthly.	Silver, monthly.	Silver, hourly.	Total employees.	Total salaries and wages.
October 1904.	14	4		18	\$887.90
November	15	5		20	1,053.86
December	16	5		21	1,088.82
January 1905.	16	4		20	1,060.98
February	20	6	3	29	1,735.76
March	27	7	4	38	2,396.57
April	26	7	5	38	2,173.12
May	26	7	12	45	2,184.87
June	29	7	10	46	2,983.74
July	31	8	10	49	2,792.49
August	35	8	14	57	3,162.77
September	37	10	11	54	4,275.26
October	39	9	10	58	4,445.88
Total					29,374.07

TABLE 10.—*Judiciary—Consolidated report of force October 1, 1904, to October 31, 1905.*

Date.	Monthly, gold.	Amount of salaries.
October 1904.	2	\$800.00
November	4	1,046.00
December	4	1,107.67
January 1905.	4	1,149.13
February	5	785.41
March	4	1,194.25
April	6	1,313.75
May	6	1,287.50
June	7	2,103.76
July	5	1,480.03
August	7	2,996.37
September	7	1,752.98
October	7	1,671.22
Total		17,888.02

REPORT OF THE ISTHMIAN CANAL COMMISSION.

79

TABLE 11.—Prosecuting attorney's office—Consolidated report of force July 1, 1905, to October 31, 1905.

Date.	Monthly, gold.	Amount.
July.....	2	\$580.17
August.....	3	607.89
September.....	2	541.67
October.....	3	541.89
Total.....		2,062.62

a Up to July, 1905, included in executive office.

TABLE 12.—Police department—Consolidated report of force October 1, 1904, to October 31, 1905.

Date.	Gold, monthly.	Silver, hourly.	Total employees.	Total salaries and wages.
1904.				
October.....	90		90	\$3,928.61
November.....	92		92	4,136.47
December.....	93		93	4,316.35
1905.				
January.....	93		93	4,266.19
February.....	93		93	4,387.67
March.....	92		92	4,415.08
April.....	116		116	5,379.52
May.....	125		125	6,296.91
June.....	132		132	6,655.50
July.....	129		129	7,384.13
August.....	133		133	7,271.19
September.....	168	7	175	7,659.63
October.....	202		202	9,135.34
Total.....				71,303.98

APPENDIX 3.—SANITARY STATISTICS.

TABLE 13.—Work of sanitation in Panama from May 4, 1904, to August 31, 1905.

Date.	Houses inspected.	Houses fumigated.	Premises cleaned.	Water barrels covered.	Cartloads yard refuse removed.	Cartloads garbage removed.	Cartloads street sweepings removed.	Average number men employed fumigating.	Average number men employed daily cleaning premises.	Average number carts employed daily cleaning premises.
1904.										
May 4 to September 30.....	1,342	39	1,582	350						
October.....	47			576	625					
November.....	25			296	355					
December.....	66			512	580					
1905.										
January.....		61		661		150		147		
February.....		343		1,192	686	676	778	198		
March.....		553			644	722	1,236	174		
April.....					556	796	1,055	197		
May.....	3,092	390			781	1,006	835	170	15	4
June.....	2,807	206		133	766	1,127	1,261	316	14	5
July.....	5,189	833		56	494	1,096	1,304	452	19	4
August.....					751	1,398	1,000	402	17	3
Total.....	12,730	2,568	1,582	3,776	6,238	6,971	7,469	2,066	164	4

TABLE 13.—Work of sanitation in Panama from May 4, 1904, to August 31, 1905—Continued.

Date.	Average number men employed daily removing garbage.	Average number carts employed daily removing garbage.	Average number men employed daily street cleaning.	Average number carts employed daily street cleaning.	Tanks and wells covered.	Water deposits oiled.	Houses screened.	New ditches made.	Ditches stoned.	Old ditches cleaned.
1905.								Lin. ft.	Lin. ft.	Lin. ft.
May.....	12	6	46	237						
June.....	15	8	55	118	1,392	7	5,190	190	15,200	
July.....	15	8	53	64		1	2,180	210	13,408	
August.....										
Total.....	16	7½	51½	7	449	1,392	8	7,310	400	28,608

TABLE 14.—Work of sanitation in Colon and Cristobal from July 1, 1904, to August 31, 1905.

Date.	Houses inspected.	Houses fumigated.	Premises cleaned.	Cartloads yard and street dirt removed.	Cartloads garbage removed.	Cartloads night soil removed.	Tanks and barrels inspected and oiled.	Blocks of streets cleaned.	Tanks and barrels covered.	Cement drains constructed.
1904.										Lin. ft.
July 1. to Sept. 30...	1,067	4	524	1,465						
October.....		4			601	118				
November.....	184				579	189				
December.....	200				549	230	49	99		
1905.										
January.....	92	20			621	220		7		
February.....	28				623	190	190	101		
March.....	18				1,091	214	1,072	496		
April.....	163				1,749	120	42	1,214		
May.....	230	351			1,400	125	596	1,033	401	
June.....		90			1,915	277	1,670	1,304		
July.....					1,839	330	613	1,248		
August.....		225			2,093	345	1,599	1,416	149	506
Total.....	1,982	694	524	1,465	13,160	2,343	5,791	7,438	650	506

Date.	Ditches constructed.	Roadway constructed.	Vegetation removed.	Surface oiled.	Water receptacles overturned.	Water receptacles collected.	Lagoons cleaned.	Cesspools cleaned.	Crab holes covered.	Crabs killed.
1905.	Lin. ft.	Lin. ft.	Sq. yds.	Sq. yds.			Sq. yds.	Sq. ft.		
May.....		300	7,655	53,036						
June.....			7,266	103,813						
July.....			6,435	16,333	3,604	10,808		2,264	7,417	3,194
August.....	1,450	150	1,670	36,666	4,981	3,582	2,699	650		
Total.....	1,450	450	22,925	209,848	8,585	14,390	2,699	2,914	7,417	3,194

REPORT OF THE ISTHMIAN CANAL COMMISSION.

81

TABLE 15.—Sanitation of the Canal Zone from July 1, 1904, to August 31, 1905.

Date.	Brush cut and cleared.	Swamps filled in.	Swamps and ponds drained.	Grass cut and burned.	New ditches dug.	Old ditches cleaned and graded.	Ditches reshaped and constructed.	Ditches new.
	Sq. yds.	Sq. yds.	Sq. yds.	Sq. yds.	Lin. ft.	Lin. ft.	Lin. ft.	Lin. ft.
1906.								
January.....	224,397	32,887			4,963	27,662		589
February.....	291,430	9,875	13,488		13,160	79,306		559
March.....	913,134	9,198	3,008	144,270	14,144	70,517		4,395
April.....	491,945	3,500	202,898	270,253	15,975	85,471		1,295
May.....	523,391	2,735	12,809	723,700	23,599	103,262		2,595
June.....	1,733,184		8,169	499,213	21,266	89,553		
July.....	1,300,516	5,639	13,120	613,394	10,292	60,597		345
August.....	912,247	3,208	605,344	1,053,573	19,275	143,015	1,088	1,520
Total.....	6,359,133	67,100	948,616	3,304,406	122,573	659,345	1,088	11,282
Date.	Night soil pails emptied daily.	Garbage cans emptied daily.	Water closets constructed.	Wells and springs cleaned and boxed.	Water barrels covered.	Water tanks covered.	Houses fumigated and disinfected.	Privy and garbage pits dug.
1904.								
July to December 31.....	74	170			705			
1905.								
January.....	116	394					7	
February.....	130	381					22	
March.....			11			12	81	
April.....	282	457	13	3		10	6	
May.....	343	596	21	4	38		115	
June.....	310	698	6	2	439		459	2
July.....	326	683	5		45		241	
August.....	362	664	1					8
Total.....	1,943	3,833	57	9	1,226	22	924	10

TABLE 16.—Summary by months of quarantine work accomplished from July 16, 1904, to September 31, 1905, inclusive.

Date.	Vessels inspected and passed.	Vessels detained in quarantine.	Vessels fumigated or disinfected.	Crew inspected.	Passengers inspected.	Persons vaccinated.	Persons held in quarantine to complete period of incubation of yellow fever and plague.	Persons held under observation to complete period of incubation of yellow fever and plague.
1904.								
July 16 to October 12.....	167	6	6					
October.....	52	1	8	3,276	2,304	106		83
November.....	54			3,937	2,376	130		25
December.....	54		1	3,609	3,146	273		54
1905.								
January.....	73		1	3,692	2,917	244	16	89
February.....	77	1	2	3,680	3,691	346	17	91
March.....	87	1	5	5,035	3,195	411	28	64
April.....	78		5	4,233	4,050	556	6	102
May.....	76		3	3,794	3,414	257	26	68
June.....	61	1	6	3,492	3,015	288	11	52
July.....	68	8	10	3,495	2,658	370	8	13
August.....	83	1	12	3,343	3,833	397	15	28
September.....	52	1	4	3,300	4,397	980	8	87
Total.....	982	15	65	44,689	35,990	4,355	145	661

TABLE 16.—Summary by months of quarantine work accomplished from July 16, 1904, to September 31, 1905, inclusive—Continued.

Date.	Persons landing from foreign ports.			Persons leaving for foreign ports.			Persons arriving from coast towns of Republic of Panama.	Persons leaving for coast towns of Republic of Panama.
	Cabin.	Steerage.	Total.	Cabin.	Steerage.	Total.		
1904.								
October.....			1,776			1,104		
November.....			1,876			1,558		
December.....			2,431			1,828		
1905.								
January.....	480	2,108	2,588	453	620	1,073		
February.....			3,182			1,122		
March.....	625	2,006	2,631	496	817	1,315	1,466	847
April.....	886	2,515	3,401	588	622	1,250	1,504	1,036
May.....	1,206	1,519	2,785	676	738	1,464	1,457	801
June.....	520	1,318	1,838	522	471	993	791	735
July.....	828	1,512	2,340	454	1,005	1,459	1,014	787
August.....	779	2,377	3,156	639	546	1,185	977	878
September.....	747	3,270	4,017	440	579	1,019	795	588
Total.....	6,131	16,625	31,971	4,270	5,448	15,370	8,024	5,622

Date.	Immigration from foreign ports.			Immigration from coast towns of Republic of Panama.	Total increase by immigration.	Immigrants recommended for rejection under immigration laws.	Certificates issued to outgoing passengers.	Persons refused certificates account diseases barred by immigration laws.	Circulars relative to malarial fever distributed.	Bills of health issued.	Bills of health viséed.
	Cabin (increase).	Steerage (increase).	Total.								
1904.											
October.....			672		672						
November.....			318		318						
December.....			603		603						
1905.											
January.....			1,515		1,515						
February.....			2,010		2,010						
March.....			1,318	619	1,937			3,213			13
April.....		1,853	2,151	468	2,619		193	3,720		2	12
May.....	298	731	1,321	676	1,997	4	56	2,559		3	9
June.....	590	847	1,437	56	1,493	19	60	2,864		2	10
July.....	374	607	981	277	1,258	1	196	2,025		2	12
August.....	140	1,831	1,971	29	2,070	17	122	2,345		2	10
September.....	807	2,691	3,498	267	3,235	1	45	2,465		3	11
Total.....	1,709	8,460	16,608	2,402	19,005	42	672	7	17,191	14	77

a Decrease.

TABLE 17.

The tabulated statement shown below gives in concise form the work accomplished during the quarantine instituted on account of plague at La Boca from June 24 to July 14, 1905:

People (residents) detained.....	897
People (not residents of La Boca) placed in camp and other quarters and detained.....	476
Houses fumigated with formaldehyde.....	5
Houses fumigated with sulphur and bichloride of mercury.....	128
Houses refumigated and disinfected.....	13
Houses washed down weekly with bichloride of mercury solution 1/1000 (and the La Boca wharf).....	10
Rations issued.....	7,930
Rats destroyed (up to July 15).....	475

(Rat destruction is being continued.)

houses only one prisoner has succeeded in breaking jail.
 A site for a penitentiary has been selected at Bohio near a large rock quarry in which the labor of prisoners can be utilized in the

REPORT OF THE ISTHMIAN CANAL COMMISSION.

83

TABLE 18.—*Report of hospitals from date of beginning operations to December 31, 1904.*

Date and hospitals.	Total number patients admitted from May 4 to Dec. 31, 1904.	Total number patients died from May 4 to Dec. 31, 1904.	Total number patients discharged from May 4 to Dec. 31, 1904.	Number patients remaining Dec. 31, 1904.
Ancon Hospital, from May 4, 1904.....	1,253	73	934	206
Miraflores Hospital. (See report January, 1905.)				
Culebra Hospital, from October 22, 1904.....	125	5	120	.....
Gorgona Hospital. (See report February, 1905.)				
Colon Hospital, from September 14, 1904.....	348	16	296	36
Total.....	1,726	94	1,390	242

REPORT OF THE ISTHMIAN CANAL COMMISSION.

Monthly report of hospitals.

JANUARY, 1905.

Hospital.	Number patients in hospital 1st of month.			Number patients admitted during month.			Number patients discharged during month.			Number patients remaining at end of month.		
	Canal employees.	Nonemploy-ees.	Panama R. R. employees.	Canal employees.	Nonemploy-ees.	Panama R. R. employees.	Canal employees.	Nonemploy-ees.	Panama R. R. employees.	Canal employees.	Nonemploy-ees.	Panama R. R. employees.
Ancon	103	88	3	194	178	62	4	244	7	14	2	23
Miraflores												
Culebra												
Gorgona												
Colon												
Total	109	121	8	253	178	62	4	412	7	14	2	23

FEBRUARY, 1905.

Ancon	103	88	3	194	178	62	4	244	7	14	2	23
Miraflores												
Culebra												
Gorgona												
Colon												
Total	109	121	8	253	178	62	4	412	7	14	2	23

MARCH, 1905.

Ancon	124	61	2	187	183	59	9	251	11	6		17
Miraflores												
Culebra												
Gorgona												
Colon												
Total	133	79	9	248	228	127	26	326	11	11	2	25

APRIL, 1905.

Ancon	123	60	6	189	228	51	13	222	10	4		14
Miraflores												
Culebra												
Gorgona												
Colon												
Total	123	60	6	189	228	51	13	222	10	4		14

REPORT OF THE ISTHMIAN CANAL COMMISSION.

85

APRIL, 1905.

Ancon	123	60	6	189	228	51	13	222	10	4	14	191	20	9	250	191	57	9	287
Miraflores				2				18							3				40
Culebra				5				60			2				52				14
Gorgona	22	31	9	62	50	59	33	142	1	7	1	57	46	34	137	14	37	7	58
Colon																			
Total	145	91	15	280	278	110	46	547	11	11	3	26	248	96	43	474	205	94	377

MAY, 1905.

Ancon	170	72	15	257	332	61	26	439	15	1	16	337	75	30	442	170	57	11	288
Miraflores				40				3							9				36
Culebra				14				84			1				32				17
Gorgona	14	37	7	58	57	87	44	188		10	3	57	65	40	162	14	49	8	71
Colon																			
Total	184	109	22	377	409	148	70	765	15	11	3	32	394	140	70	735	184	106	375

JUNE, 1905.

Ancon	170	57	11	238	481	90	41	612	15	11	26	411	94	37	542	225	42	15	282
Miraflores				36				26							8				52
Culebra	17			17	140	11		151	5	1	6	134	7		141	18	3		21
Gorgona	13			13				37							38				12
Colon	14	49	8	71	118	80	45	243	2	14	4	20	100	88	220	30	27	17	74
Total	214	105	19	375	739	181	86	1,069	22	26	4	54	645	169	949	273	72	32	442

JULY, 1905.

Ancon	225	42	15	282	678	100	67	845	26	8	35	634	88	64	936	193	46	17	256
Miraflores				45				18			2				6				36
Culebra	18	3		21	216	7		233	1		1	204	8		212	28	2		30
Gorgona	30	27	17	74	176	83	56	315	13	12	8	163	63	41	94	31	30	26	14
Colon															269				87
Total	273	72	32	494	1,070	190	123	1,497	40	20	9	71	1,033	105	1,417	252	76	43	442

^a All lepers.

^b Run away.

Monthly report of hospitals—Continued.

AUGUST, 1906.

Hospital.	Number patients in hospital list of month.			Number patients admitted during month.			Number patients died during month.			Number patients discharged during month.			Number patients remaining end of month.		
	Canal employees.	Nonemployees.	Panama R. R. employees.	Canal employees.	Nonemployees.	Panama R. R. employees.	Canal employees.	Nonemployees.	Panama R. R. employees.	Canal employees.	Nonemployees.	Panama R. R. employees.	Canal employees.	Nonemployees.	Panama R. R. employees.
Ancon	193	17	46	256	442	72	22	1	7	532	54	71	232	23	60
Miraflores	14	44	55	113	13	13	6	6	6	171	6	14	14	14	49
Culebra	28	2	30	163	14	14	2	2	2	171	6	177	24	34	34
Gorgona	31	30	26	87	57	26	1	10	4	176	62	68	56	13	15
Colon	252	49	442	992	142	146	49	21	11	299	123	134	324	57	73
Total	516	106	618	1,388	1,388	1,388	111	111	111	1,256	1,256	1,256	1,256	1,256	1,256

RECAPITULATION.

Hospital.	Total number patients treated.			Americana.			Other nations.		
	Canal employees.	Nonemployees.	Panama R. R. employees.	White.	Colored.	Total.	White.	Colored.	Total.
Ancon	3,343	1,611	12	983	35	1,018	436	3,510	3,510
Miraflores	14	44	55	133	0	133	0	48	48
Culebra	711	350	1	133	0	133	55	873	873
Gorgona	297	118	1	62	0	62	17	336	336
Colon	1,024	462	386	323	11	334	803	1,045	1,045
Grand total	5,376	2,569	408	1,502	46	1,548	1,013	5,812	6,725

TABLE 10

November
DecemberJanuary
February
March
April

TABLE 20

July
August
September
October
November
DecemberJanuary
February

TABLE 2

Typhoid fever
Malarial fever
Pernicious anemia
Measles
Scarlatina
Grippe
Dysentery
Plague
Yellow fever
Leprosy
Beriberi
Tuberculosis
Generalized syphilis
Cancer with liver
Cancer and organs not specified
Chronic rheumatism
Anæmia, chlorotic
Other general diseases

TABLE 19.—Death rate in the Canal Zone, Panama, and Colon from November, 1904, to October, 1905, inclusive.

Date.	Entire population death rate per 1,000.	Employees of Isthmian Canal Commission death rate per 1,000.	Date.	Entire population death rate per 1,000.	Employees of Isthmian Canal Commission death rate per 1,000.
1904.			1905.		
November.....	40.18	(a)	May.....	50.19	27.5
December.....	45.96	20.57	June.....	65.04	27.42
1905.			July.....	69.22	46.11
January.....	43.77	18.11	August.....	64.95	35.98
February.....	40.75	14.00	September.....	62.50	33.52
March.....	46.57	14.66	October.....	66.40	38.00
April.....	49.88	15.82	Average.....	53.78	24.80

(a) No record.

TABLE 20.—Total number of cases of yellow fever and deaths, by months, from July 1, 1904, to October 31, 1905.

Date.	Cases.	Deaths.	Date.	Cases.	Deaths.
1904.			1905.		
July.....	2	1	March.....	11	3
August.....			April.....	9	2
September.....	1	1	May.....	33	8
October.....	2		June.....	62	19
November.....	2		July.....	42	13
December.....	6	1	August.....	27	9
1905.			September.....	7	4
January.....	19	8	October.....	4	2
February.....	14	9	Total.....	241	80

TABLE 21.—Table showing deaths by diseases from May 1, 1905, to August 31, 1905.

[Including the cities of Panama and Colon.]

	Ancon Hospital.	Line hospitals.	City of Panama.	Cities of Colon and Cristobal.	Colon Hospital.	Canal Zone.	Total.
I.—General diseases.							
Typhoid fever (abdominal typhus).....	7	1	2				10
Malarial fever.....	11	4	15	19	21	16	86
Pernicious fever.....			17	5			22
Measles.....			3	6		1	10
Scarlatina.....			1				1
Grippe.....						1	1
Dysentery.....	7		24		7	8	46
Plague.....	2						2
Yellow fever.....	21		11	5	10		47
Leprosy.....		2	1			4	7
Beriberi.....	4		28	1	2	1	36
Tuberculosis of lungs.....	3	5	26	9	5	6	54
Generalized tuberculosis.....	1		1		3		5
Syphilis.....			2				2
Cancer with other malignant tumors of the stomach and liver.....			2	1			3
Cancer and other malignant tumors of other organs and organs not specified.....	1		1				2
Chronic rheumatism and gout.....			2	1		1	4
Anæmia, chlorosis.....			6	4		1	11
Other general diseases.....	1						1
Alcoholism, acute or chronic.....			10	3			13

REPORT OF THE ISTHMIAN CANAL COMMISSION.

TABLE 21.—Table showing deaths by diseases, etc.—Continued.

(Including the cities of Panama and Colon.)

	Ancon Hospital.	Line hospitals.	City of Panama.	Cities of Colon and Cristobal.	Colon Hospital.	Canal Zone.	Total.
II.—Diseases of the nervous system and the organs of special sense.							
Encephalitis			1		1		2
Simple meningitis	1		7	1			9
Cerebral congestion and hemorrhage		2	3		2		7
General paralysis			6			2	8
Insanity			1				1
Epilepsy			1			1	2
Convulsions of children			1				1
Tetanus	1		8	3	1		13
Other diseases of the nervous system	2		1	1	1	1	6
III.—Diseases of the circulatory system.							
Pericarditis	1		1				2
Acute endocarditis	1						1
Organic disease of the heart	3	1	10	8	2	2	21
Angina pectoris			2				2
Affections of the arteries (atheroma, aneurism)			1	1			2
IV.—Diseases of the respiratory system.							
Affections of the larynx			1				1
Acute bronchitis			20				20
Chronic bronchitis			1				1
Broncho-pneumonia	3						3
Pneumonia	7	8	24	4	7	4	49
Pleurisy	1		1		1		3
Asthma	1		4				5
Pulmonary emphysema			4				4
V.—Diseases of the digestive system.							
Other affections of the stomach (cancer excepted)			24	3			27
Chronic diarrhea and enteritis			4		1		5
Diarrhea and enteritis			24	17	1	15	57
Intestinal parasites	1	1	9	2	1	5	19
Hernias (intestinal obstructions)	2			1			3
Cirrhosis of the liver	1		2		1		4
Other affections of the liver	2		18	1	1	2	24
Simple peritonitis (puerperal excepted)	2			2			4
Other affections of the digestive system (cancer and tuberculosis excepted)	1				1		2
VI.—Diseases of the genito-urinary system and its adnexa.							
Acute and chronic nephritis	2	2	14	6	7		31
Other diseases of the kidneys and their adnexa				1		1	2
Diseases of the bladder			2				2
VII.—The puerperal state.							
Accidents of labor			4	1	1		6
Other puerperal accidents (sudden death)				1		1	2
VIII.—Diseases of the skin and cellular tissues.							
Diseases of the skin and its adnexa	1		5				6
IX.—Early infancy.							
Special diseases of early infancy			16	4		1	21
X.—Old age.							
Senile debility	2		3	4			9
XI.—Affections produced by external causes.							
Suicides			1				1
Fractures					2		2
Burns				1	1		2
Accidental submersion	1			1			2
Other external violence		1	4	3		4	12
XII.—Ill-defined diseases.							
Dropsy			14	3		3	20
Unspecified or ill-defined causes of death	1		105	27		56	188
Number of deaths in Panama, Colon, and the Canal Zone from May 1, 1904, to April 30, 1905	143	12	688	196	52	109	1,200
Grand total	238	34	1,182	343	132	246	2,175

TABLE 2

Mu

Ancon...
Emperado...
Gorgona...
Buenavista...
Cristobal...

Ancon...
Emperado...
Gorgona...
Buenavista...
Cristobal...

Ancon...
Emperado...
Gorgona...
Buenavista...
Cristobal...

Ancon...
Emperado...
Gorgona...
Buenavista...
Cristobal...

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Ancon...
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Gorgona...
Buenavista...
Cristobal...

Ancon...
Emperado...
Gorgona...
Buenavista...
Cristobal...

Ancon...
Emperado...
Gorgona...
Buenavista...
Cristobal...

Total

REPORT OF THE ISTHMIAN CANAL COMMISSION.

89

APPENDIX 4.—MUNICIPAL STATISTICS.

TABLE 22.—Receipts of the various municipalities of the Canal Zone from November 1, 1904, to September 30, 1905.

Municipality.	Date.	Balance on hand Nov. 1, 1904.	Licenses and taxes.	Municipal fines and costs.	Total.
Ancon.....	1904, November....	\$206.16	\$455.50	\$71.00	\$734.46
Emperador.....	do.....	118.15	2,094.90	406.00	2,619.05
Gorgona.....	do.....	675.20	1,029.60	50.50	1,755.30
Buenavista.....	do.....	82.65	613.00	11.00	706.65
Cristobal.....	do.....	154.33	5,504.10	150.50	6,809.96
Ancon.....	December.....		406.00	103.80	509.80
Emperador.....	do.....		2,085.80	372.00	2,457.80
Gorgona.....	do.....		961.70	120.50	1,082.20
Buenavista.....	do.....		296.50	23.00	319.50
Cristobal.....	do.....		605.50	460.25	1,065.75
					5,924.55
Ancon.....	1905, January.....		586.45	356.37	942.82
Emperador.....	do.....		2,034.00	588.50	2,622.50
Gorgona.....	do.....		1,019.70	90.00	1,109.70
Buenavista.....	do.....		126.40	16.00	142.40
Cristobal.....	do.....		667.90	170.50	838.40
Ancon.....	February.....		502.50	238.00	740.50
Emperador.....	do.....		2,589.04	592.00	3,181.04
Gorgona.....	do.....		1,064.20	213.00	1,277.20
Buenavista.....	do.....		949.00	36.70	985.70
Cristobal.....	do.....		670.50	1,092.70	1,763.20
					7,937.64
Ancon.....	March.....		601.50	212.50	814.00
Emperador.....	do.....		2,638.00	378.00	3,016.00
Gorgona.....	do.....		1,102.70	139.00	1,241.50
Buenavista.....	do.....		388.70	10.80	399.50
Cristobal.....	do.....		849.98	380.00	1,229.98
Ancon.....	April.....		592.20	317.60	909.80
Emperador.....	do.....		2,693.50	455.00	3,148.50
Gorgona.....	do.....		1,110.75	108.10	1,218.85
Buenavista.....	do.....		564.10	51.00	615.10
Cristobal.....	do.....		1,017.80	333.00	1,350.80
					7,242.55
Ancon.....	May.....		628.70	408.00	1,036.70
Emperador.....	do.....		2,660.30	165.00	2,825.30
Gorgona.....	do.....		1,215.30	112.50	1,327.80
Buenavista.....	do.....		553.20	85.60	638.80
Cristobal.....	do.....		1,037.00	322.00	1,359.00
					7,187.60
Ancon.....	June.....		814.35	264.70	1,079.05
Emperador.....	do.....		3,749.52	145.00	3,894.52
Gorgona.....	do.....		3,289.90	76.50	3,366.40
Buenavista.....	do.....		825.35	66.30	891.65
Cristobal.....	do.....		977.95	178.00	1,155.95
					10,387.57
Ancon.....	July.....		757.90	354.80	1,112.70
Emperador.....	do.....		11,759.85	266.00	12,025.85
Gorgona.....	do.....		5,199.35	328.00	5,527.35
Buenavista.....	do.....		1,268.80	88.90	1,357.70
Cristobal.....	do.....		1,242.75	113.70	1,356.45
					21,380.05
Ancon.....	August.....		737.60	583.50	1,321.10
Emperador.....	do.....		4,641.35	741.50	5,382.85
Gorgona.....	do.....		1,816.85	98.00	1,914.85
Buenavista.....	do.....		528.50	133.80	662.30
Cristobal.....	do.....		620.50	143.60	764.00
					9,915.10
Ancon.....	September.....		5,640.50	263.00	5,903.50
Emperador.....	do.....		3,037.00	581.00	3,618.00
Gorgona.....	do.....		1,688.85	220.70	1,909.55
Buenavista.....	do.....		1,111.85	55.90	1,167.75
Cristobal.....	do.....		1,262.50	145.60	1,408.10
					14,006.90
Ancon.....	October.....		660.00	718.50	1,378.50
Emperador.....	do.....		3,737.80	520.00	4,257.80
Gorgona.....	do.....		3,567.20	403.00	3,970.20
Buenavista.....	do.....		1,179.00	58.30	1,237.30
Cristobal.....	do.....		642.50	221.50	864.00
					11,716.80
Total.....		1,138.51	98,210.85	15,390.82	114,740.17

Includes chief sanitary office, maritime quarantine service, hospital service, sanitation service.

REPORT OF THE ISTHMIAN CANAL COMMISSION.

TABLE 22.—Receipts of the various municipalities of the Canal Zone from November 1, 1904, to September 30, 1905—Continued.

RESUME.

	Ancon.	Empire.	Gorgona.	Buena- vista.	Cristobal.	Total.
Total receipts, Nov. 1, 1904, to Oct. 31, 1905.....	\$15,582.13	\$40,978.71	\$25,590.00	\$9,624.85	\$13,964.08	\$114,740.17
Total expenditures, Nov. 1, 1904, to Oct. 31, 1905.....	8,180.56	15,544.71	10,700.86	4,267.15	8,790.35	47,486.12
Cash balance, Oct. 1, 1905.....	8,401.87	33,434.00	14,887.55	5,357.20	5,173.73	67,254.05

TABLE 23.—Disbursements of the various municipalities of the Canal Zone—Continued.

Municipality.	Month.	Govern- ment.	Public In- struction.	Justice.	Public works.	Total.
1904.						
Ancon.....	November.....	\$152.30		\$155.00		\$307.30
Emperador.....	do.....	786.10	\$210.00	285.20	\$20.50	1,301.80
Gorgona.....	do.....	254.70	110.00	117.90	30.00	512.60
Buonavista.....	do.....	202.45	60.00	192.10		454.55
Cristobal.....	do.....		40.00	2.50	30.00	72.50
						\$2,619.35
Ancon.....	December.....	355.35		262.30		617.65
Emperador.....	do.....	476.50	420.00	391.90	59.00	1,347.40
Gorgona.....	do.....	188.80	110.00	139.40		438.20
Buonavista.....	do.....	448.65	60.00	109.80	3.50	621.45
Cristobal.....	do.....	317.10	40.00	252.20	90.60	699.90
						3,724.60
1905.						
Ancon.....	January.....	395.20		208.95		604.15
Emperador.....	do.....	338.50	210.00	309.60	458.80	1,316.90
Gorgona.....	do.....	214.00	110.00	121.00		445.00
Buonavista.....	do.....	180.00	60.00	111.40	4.20	355.60
Cristobal.....	do.....	120.92	140.00	467.50	11.00	739.42
						3,414.05
Ancon.....	February.....	592.20		230.60		822.80
Emperador.....	do.....	917.90	210.00	265.40		1,393.30
Gorgona.....	do.....	231.50	50.00	128.60		410.10
Buonavista.....	do.....	263.90		112.30	1.00	377.20
Cristobal.....	do.....		88.00	248.60	136.40	468.00
						3,471.40
Ancon.....	March.....	440.80		287.25		728.05
Emperador.....	do.....	483.65	140.00	448.20	89.50	1,131.35
Gorgona.....	do.....	804.75	123.35	172.60		1,100.70
Buonavista.....	do.....	270.05		2.40	6.40	278.85
Cristobal.....	do.....	50.00	115.86	25.70	55.68	477.21
						3,716.16
Ancon.....	April.....	505.00		257.40		762.40
Emperador.....	do.....	412.90	247.20	360.80	15.30	1,066.20
Gorgona.....	do.....	437.30	100.00	128.80	5.85	671.95
Buonavista.....	do.....	276.60		12.60		289.20
Cristobal.....	do.....	515.00	172.00	88.80	14.50	790.30
						3,580.05
Ancon.....	May.....	470.12		229.45	88.00	787.57
Emperador.....	do.....	462.85	200.00	246.92		909.77
Gorgona.....	do.....	402.80	100.00	124.00		626.80
Buonavista.....	do.....	289.70		5.70		295.40
Cristobal.....	do.....	897.50	178.00	112.30		1,187.80
						3,807.34
Ancon.....	June.....	535.80		216.65		752.45
Emperador.....	do.....	835.61	98.50	222.20		1,156.31
Gorgona.....	do.....	324.70	75.00	147.80	446.60	994.10
Buonavista.....	do.....	253.35		21.30	2.35	277.00
Cristobal.....	do.....	845.50	116.00	122.05		1,083.55
						4,263.36
Ancon.....	July.....	444.30		196.65		640.95
Emperador.....	do.....	635.00	140.00	373.95		1,148.95
Gorgona.....	do.....	377.60	50.00	149.00	1,202.50	1,779.10
Buonavista.....	do.....	238.95		66.25		305.20
Cristobal.....	do.....	646.22		56.10		702.32
						4,636.52
Ancon.....	August.....	472.65		199.10		671.75
Emperador.....	do.....	797.30	210.00	277.00		1,284.30
Gorgona.....	do.....	267.00	93.10	165.60	149.50	675.20
Buonavista.....	do.....	269.00		100.00		369.00
Cristobal.....	do.....	650.00	80.00	34.40		764.40
						3,765.65

REPORT OF THE ISTHMIAN CANAL COMMISSION.

91

TABLE 23.—Disbursements of the various municipalities of the Canal Zone—Continued.

Municipality.	Month.	Government.	Public instruction.	Justice.	Public works.	Total.
1905.						
Ancon	September...	\$455.10		\$300.00		\$755.10
Emperador	do	790.00	\$70.00	188.30	\$408.65	1,457.35
Gorgona	do	254.40	\$7.30	304.60	5.25	849.55
Huenavista	do	205.80		100.00		305.80
Cristobal	do	974.50	80.00	27.60		1,092.10
						\$4,040.90
Ancon	October	487.35		363.05		850.41
Emperador	do	627.00	210.00	373.40	820.70	2,031.10
Gorgona	do	708.84	60.00	219.80	1,512.41	2,490.05
Huenavista	do	271.50		55.10		326.60
Cristobal	do	537.00	80.00	90.60		712.60
						6,416.76
Total		26,046.00	4,744.31	11,028.60	5,607.16	47,486.18

APPENDIX 5.—STATISTICS—DEPARTMENT OF REVENUES.

TABLE 24.—Division of Customs—Statement of transactions, port of Ancon, from July 2, 1904, to September 30, 1905.

Nation.	Class.	Entering.		Clearing.	
		Number.	Tonnage.	Number.	Tonnage.
American	Sail	2	1,971	2	1,971
Do	Steam	77	147,039	76	145,092
British	do	36	67,118	33	58,841
Chilean	do	32	52,919	32	52,919
German	do	9	22,049	9	22,049
Total		156	291,096	152	280,872
American warships		6	19,213	5	18,213

a Displacement.

Vessels remaining in port	4
Tonnage remaining in port	10,224
Services rendered seamen:	
Seamen discharged	60
Seamen shipped	42
Seamen deserted	38
Seamen deceased	0
Movement of passengers and cargo:	
Cargo arriving, in transit	tons.. 127,755
Cargo arriving, local	do.. 16,683
Cargo departing, in transit	do.. 176,426
Cargo departing, local	do.. 1,087
Passengers arriving, first class	2,683
Passengers arriving, second class	3,557
Passengers departing, first class	2,806
Passengers departing, second class	3,005

REPORT OF THE ISTHMIAN CANAL COMMISSION.

TABLE 25.—United States surcharged postage stamps—Report covering period from October 1 to December 11, 1904, inclusive.

Post-office.	Stamps delivered from Oct. 1 to Dec. 11, 1904.	Balance due Sept. 30, 1904.	Remittances from Oct. 1 to Dec. 12, 1904.	Balance due Dec. 12, 1904.
Ancon	\$408.00	\$118.44	\$509.64	\$11.80
Culebra	131.26	104.135	187.51	107.005
Empire	84.00	108.08	142.66	169.42
Matachin	75.00	12.34	45.14	89.10
Gorgona	68.00	11.70	85.00	8.80
San Pablo	14.00	8.10	15.81	8.79
Bohio	36.50	15.485	41.975	.01
Gatun	15.00	6.65	18.04	8.81
Cristobal	726.00	149.19	848.40	26.79
La Boca	135.00	27.005	108.005	54.00
Administration building	815.50	125.425	798.415	142.51
Total	2,493.26	801.45	2,783.995	510.735
Total		3,294.73		3,294.73

The amounts shown against each office as balance due December 12, 1904, have been turned in as postage unsold, and the accounts of the United States surcharged stamps settled as shown by reports to the governor and auditor.

TABLE 26.—Panama surcharged postage stamps—Report covering period from December 12, 1904, to September 30, 1905, inclusive.

Post-office.	Delivered from Dec. 12, 1904, to Sept. 30, 1905.	Sales from Dec. 12, 1904, to Sept. 30, 1905.	Balance due on Sept. 30, 1905.	Date of organization of post-offices, 1905.
Ancon	\$1,682.00	\$1,592.00	\$90.01	
La Boca	516.00	435.10	80.90	
Pedro Miguel	78.00	46.25	31.75	Aug. 12, 1905
Empire	1,807.00	1,694.30	112.70	
Matachin	1,146.00	1,088.27	57.73	
Bohio	368.00	317.09	50.91	
Corozal	180.00	150.73	29.27	
Gorgona	261.00	202.00	59.00	June 1, 1905
Gatun	616.00	559.54	56.44	
Paraiso	106.00	70.80	35.20	
San Pablo	208.00	170.00	38.00	Apr. 5, 1905
Tabernilla	90.00	48.28	41.72	
Cristobal	78.00	42.15	35.85	Apr. 6, 1905
Administration building	3,522.00	2,912.50	609.50	
	2,519.00	2,391.00	128.00	
Total		11,720.12	1,452.88	
Total	13,173.00		13,173.00	

NOTE.—All other offices organized June 24, 1904.

TABLE 27.—*School census of the Canal Zone.*

TABLE 28—Continued.

Village.	Number of children.	Schools proposed.	Schools at present.
Catun.....	74	3	1
Jamaquita.....	48	1	
Mindi.....	20	1	
Ahora Lagarto.....	10		
Lion Hill.....	15		
Penas Blancas.....	19		
Buenavista.....	33	1	
Taberville.....	52	1	
Pohio.....	118	1	1
Prijoles.....	30	1	
Total.....	1,906	42	5

TABLE 29.—Land division.

Leases in effect to January 21, 1906.....	1,062
Leases issued from January 21 to September 30, 1905.....	160
Total.....	1,222
Leases canceled from January 21 to September 30, 1905.....	405
Leases in effect to September 30, 1905.....	817
Buildings and rooms.....	33
Lands for agricultural purpose.....	376
Lands for building lot.....	408
Total.....	817
Receipts uncollected to January 21, 1906.....	\$5,256.00
Receipts issued from January 21 to September 30, 1905.....	7,569.03
Total.....	12,825.03
Receipts collected from January 21 to September 30, 1905.....	6,871.53
Receipts canceled from January 21 to September 30, 1905.....	326.86
Receipts uncollected to September 30, 1905.....	5,628.63
Total.....	12,825.03

August	66	10	60	44,000	28,900	4,000	140	600
September	66	10	60	44,000	28,900	4,000	140	600
Total	132	20	120	88,000	57,800	8,000	280	1,200

B. Dec. 127, 50-1—0

REPORT OF THE ISTHMIAN CANAL COMMISSION.

95

APPENDIX 6.—STATISTICS—CRIMINAL.

TABLE 30.—Statement of all arrests made by the Canal Zone police force, covering the period from November 1, 1904, to and including October 31, 1905.

	November.	December.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	Total.
Accidental shooting	1												1
Assaulting police							1	1					2
Assaults			1		1	4							6
Assault and battery	4	15	8	1	5	2	5	5	5	2	5	4	61
Assault with deadly weapon	2	2	3	3	1	3		2	2	3		6	27
Asleep on duty								1					1
Adultery and lewdness		2	3									2	7
Attempt to commit rape						2							2
Allowing animals at large	5												5
Attempted suicide	1												1
Attempted assault		1	1	3	2	1		1	2		1		14
Assault	3	17	16	19	10	7	9	15	20	17	16		149
Abusive language		8	11	1				1	1	1	1		24
Burglary		1			1					4		2	8
Breaking cargo									1				1
Breaking and entering									1	1			2
Breaking jail								1	1				2
Brutality and failure to provide	1												1
Conspiracy						1	3						4
Carrying concealed weapons										2	1		3
Contempt		2		1				1	2	2	1		12
Cruelty to animals	2		2	4			2						11
Cruelty to children											1		1
Drunk and disorderly	22	49	42	51	35	41	44	15	19	20	36	54	428
Disorderly conduct	6	25	11	9	5	15	16	5	9	10	16	16	148
Deserter	1			2					2	2			8
Destroying Government property		1			1								2
Drunk	13	9	6	12	7	6	10	5	6	6	11	18	109
Disturbing the peace	25	34	21	21	21	24	6	12	7	6	11	18	200
Drunk and abusive	2									9	12	8	31
Discharging firearms in town				1						2			3
Embarrassment		3											3
False declaration				3				6				2	11
Fighting	8	14	2		3			1		8			33
Forgery	2							3	2	8	5	14	34
False weights	1			2	6		1	4					15
Gambling		7	5			6	2	5		1		2	28
Intimidating police			1										1
Insane	2							1	2	3	6		15
Indecent language													
Indecent exposure	2	3	2	5	4			1		2			12
Inceudiarism					1						5		6
Impersonating an officer						1							1
Illegal trading													
Insulting woman	2		2				2	2	3	10	4	4	27
Interfering with arrest	1	5	1	4	10	2	1						23
Insolent and abusive language	1							2	2	3	6	4	19
Illicit distilling		3											3
Illtreating prisoner				1									1
Larceny	2	18	11	11	24	11	13	7	12	31	12	16	168
Letting prisoner escape				1									1
Malicious destruction of property						2							2
Mayhem				1	1								2
Obtaining money under false pretenses	1	2		1	6	1		2	2	7	5	4	31
Prostitution		2											2
Obscene language	14	6	5	10	1	3	4	2	2	8	1	6	57
Public nuisance	4												4
Perjury										1			1
Rape				1			1						2
Robbery			1										1
Resisting arrest	1					2	1			1			5
Resisting an officer													
Releasing a prisoner	4		1					1		2	3	8	19
Runaway from home							1						1
Request of Panaman Government				1		1				1		2	5
Slander	7	2		1	4			1		1	1		17
Suspicious character		2	1		4				1				11
Trespassing				2				1	1				4
Threatening		1	2	3	4	1	2	1	1	1	5	2	23
Vagrancy	2	4	1	4	3	6	6	10	8	7	5	4	58
Violating sanitary regulations	29	28	30	28	26	58	8	7	18	36	11	68	361
Violating quarantine regulations									2		2		4
Miscellaneous			4	4	5	8	15	8	8	8	4		87
Total	171	283	195	225	217	225	163	120	155	197	184	200	2,879

APPENDIX 7.—PROVISIONAL RULES AND REGULATIONS IN REGARD TO PROCEDURE IN THE COURTS OF THE CANAL ZONE.

[As prescribed by F. Mutis Duran, chief justice; Heseekiah A. Gudger, Lorin C. Collins, associate justices of the supreme court.]

Remarks.

Before entering on the requirements contained in act No. 1, sections 19 and 20, of the Laws of the Canal Zone, in regard to rules of the court, costs, etc., it seems proper to give a short résumé of the courts and their prerogatives as constituted by said act.

SUPREME COURT.

By virtue of the laws referred to there are established within the Zone a supreme court, three circuit courts, and various municipal courts. The supreme court is composed of a chief justice and two associate justices, and these judges are assigned to and hold the circuit courts of the Zone. The supreme court has original jurisdiction in habeas corpus, mandamus, certiorari, prohibition, and quo warranto, and has appellate jurisdiction in all questions of law appealed from the circuit courts. In this court, by the laws of the Canal Zone, only questions of law will be determined on appeal, and no new proof will be admissible before said court. (See Laws of Canal Zone, p. 3, secs. 1 to 12.)

CIRCUIT COURTS.

The circuit courts have rather extensive jurisdiction, and embrace all criminal matters where the fine may exceed \$25 or imprisonment imposed for more than thirty days, or both, and also in any offense which is not declared to be a simple misdemeanor. In criminal matters, both in the circuit and municipal courts, the Laws of the Canal Zone apply. With regard to civil matters, the circuit courts have original jurisdiction of all controversies on contracts for more than \$100 gold value, as well as other civil matters, with the exception of forcible entry into and unlawful detainer of real estate. (See Canal Zone Code, act No. 1, secs. 21 to 25.)

MUNICIPAL COURTS.

The municipal courts have original jurisdiction in all criminal matters where the fine may not exceed \$25 and the imprisonment thirty days, or where the crime is punishable by the statute as a misdemeanor. This court has preliminary jurisdiction to hear all criminal charges within its jurisdiction that are properly triable by the circuit courts and to determine whether or not the party accused should be discharged, or whether there is probable cause so that the defendant may be held to answer in the circuit court. In civil matters it has jurisdiction on contracts where the amount in controversy does not exceed \$100 gold value, and also in actions for forcible entry into and unlawful detainer of real estate. (Act No. 1, secs. 30 to 32, Canal Zone Code.)

APPEALS.

From a municipal court an appeal can be taken to the circuit court. If this appeal is taken purely upon a point of law, it will be decided upon the record in the cause; if upon questions of fact, a trial de novo will be held. On trial either before the circuit or municipal court the judgment is final unless an appeal is taken and a reversal had by the proper court.

NEW TRIAL.

In the circuit courts of the Zone any party who has diligently brought out his facts before the court, and yet from some unforeseen cause has left out some important document or material evidence not known at the time of the trial, but discovered afterwards, may move for a new trial, which can be granted in case the presiding judge feels that justice will be promoted by so doing; provided the party moving for such new trial shall show these facts in an affidavit presented before said court within thirty days from the date of the judgment. New trials may also be granted for errors of law or procedure in the first trial.

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GENERAL REMARKS.

The above statement, as well as the following rules, are deductions from the Laws of the Canal Zone and from the laws existing in said Zone on the 26th day of February, 1904, taking as a basis the Laws of the Canal Zone as enacted by the Commission. It will be observed that the differences between the Canal Zone laws and the codes of the Republic of Panama are, as a rule, immaterial, and go more to the method or mode of procedure than otherwise. It may be well also to say here that this statement and the rules which follow are provisional and subject to change, abrogation, or amendment at any time that a majority of the justices shall so determine.

Provisional rules and regulations in regard to procedure, etc., in the courts of the Canal Zone.

CIVIL ACTIONS.

In the courts of the Canal Zone the Laws of the Canal Zone are taken as a basis, and these, in connection with the laws in force in said Zone on the 26th day of February, 1904, will be applied to all civil matters.

Litigants therefore will observe the following provisional rules:

COMMENCEMENT OF ACTION.

1. An action will be commenced by a memorial, petition, or complaint addressed to the court, in which shall be set forth the name and address not only of the petitioner, but as well of all other persons interested in said action, whether petitioners or defendants. It shall also state clearly the thing demanded, with a full and correct description of the same, and, in case of real estate, the limits and locations shall be specifically set forth.

The different allegations shall be separately paragraphed and numbered, and reference shall be made to the section of the code which forms the basis of the action. All the pleadings shall be in writing, and all documents relied upon shall accompany the petition; or, if not in the possession of the petitioner, this fact shall be made known in the petition and reference made to the archives where the original document may be found. (Nos. 36 to 41, inclusive, and 840 to 842, inclusive, Judicial Code.)

A properly authenticated copy of said document, made by the officer in charge of said archives, may be used as evidence in lieu of the original.

All papers in the case may be written either in English or Spanish, and must be on regular legal cap paper, written on but one side. For convenience, papers in the case written on the typewriter are desirable, though not obligatory.

SUMMONS.

2. After the petition has been presented to the court and the above requirements complied with, the court shall order the clerk to issue a summons or notice to the party or parties defendant, setting a day on which they shall appear in court to answer the memorial or complaint, and said day shall be at least ten days after the service of said summons or notice. The notice or summons herein referred to shall be placed in the hands of the marshal of the court, and by him served on the defendant or defendants by delivering to them a copy of the same, together with a copy of the memorial.

ANSWER, DEMURRER, ETC.

3. Defendants, when they appear in court, may, if they choose, file a demurrer for any one of the following causes:

- (a) As to the competency of the court.
- (b) That the petition has not been drafted according to law.
- (c) That there are other judicial proceedings in regard to the same matter.
- (d) That petitioner or petitioners are not the real person or persons he or they claim to be. (No. 269, Judicial Code.)
- (e) That the facts stated in the petition are not sufficient to constitute a cause of action in favor of the plaintiff and against the defendant or defendants.

FURTHER PLEADING.

4. In case the defendant does not demur, or, having demurred, the same is not sustained, then he may, at the discretion of the court, file his answer; which shall be responsive to each allegation contained in the petition. A failure to so respond will be an admission that the allegations not controverted are true. The defendant or defendants, if the facts warrant, may allege additional facts as matters of defense; provided, that the facts alleged relate to the subject-matter set forth in the memorial. (See Nos. 264, 265, 266, 267, 269, and 273, Judicial Code.)

Other pleadings will be governed by the facts in each case, and permitted if, in the opinion of the court, the ends of justice will be subserved thereby.

UPON AGREEMENT OF FACTS.

5. When all the facts have been agreed to by the parties, but the legality of the claim is in question, the court will dispose of the matter after hearing the parties. (No. 856, Judicial Code.)

TAKING OF TESTIMONY.

6. When all the pleadings in the cause are settled and the issue between the parties ascertained, a day will be appointed for hearing the testimony, either orally or documentary. In fixing this date the convenience of witnesses and attorneys will be considered. (Nos. 875 and 876, Judicial Code.)

WITNESSES.

7. When the witnesses are produced in court they will be examined and cross-examined orally and in open court, and such parts of their testimony as the court may consider material will be reduced to writing.

Parties interested in the suit may be examined in their own behalf and such weight given their testimony as the court may feel that it deserves.

DEPOSITIONS.

8. Where a case has been instituted and either of the parties desires to take the deposition of a witness or witnesses to be used at the trial, it can be done in the following cases:

(1) Where the witness is beyond the jurisdiction of the court at the time of the trial;

(2) To preserve testimony where it is alleged that the witness is old or infirm and will not likely live or, if living, be able to attend court.

Before issuing an order to take testimony as above set forth, the facts must be shown affirmatively; and, in the second case, the testimony can only be read in evidence if the witness be not living at the date of trial or, if living, be unable on account of old age or infirmity to attend court.

In both instances the commission will be issued by the court to take such testimony, all interested parties notified, and each given the right to examine and cross-examine the witness or witnesses.

The party applying for this privilege must deposit in advance a sufficient amount to cover the costs of taking the deposition.

APPEALS.

9. No appeal will be granted until final judgment is entered, unless it be on a motion made which affects the very substance of the matter in controversy.

However, parties can note exceptions, either to the admission of evidence or to the rulings of the court during the progress of the case, and take their appeal at or after the rendition of final judgment. The appellant shall give notice of appeal on the day final judgment is entered, or within five days thereafter, and shall, within fifteen days of the date of the judgment, file his bill of exceptions, in which he shall show clearly and concisely the grounds on which he bases his appeal, together with the evidence bearing upon the point appealed from. The opposing party may agree to this statement, or, failing to do so, may file a counter statement. In either case it is the duty of the judge to approve the one or the other statement or to make a statement de novo for the appellate court.

In all cases of appeal the appellant shall give bond for the costs of the appeal, or in lieu thereof make a cash deposit. The amount of this bond or deposit is discretionary with the court.

SPECIAL PROCEEDINGS.

10. In all special proceedings all parties interested in the subject-matter must be made either plaintiffs or defendants. If in the progress of the cause it is discovered that there are persons who have an interest in the matter in controversy and are not before the court, it will be the duty of the petitioner or plaintiff to make such parties either plaintiffs or defendants, and until this is done no further proceedings will be had in the cause.

BRIEFS AND ARGUMENTS.

11. Either party may, if he chooses, file a brief showing his view of the law and of the facts applicable to the cause he represents, which brief shall refer specially to the section of the code and the page of evidence which may be quoted.

Each party may also file an argument to be submitted to the court, provided the same is in typewriting; and in addition each party may argue the case orally before the court, and for this purpose each side represented will be allowed one hour, which for good reason may be extended by the court. In all civil cases the affirmative of the proposition will be allowed to open and conclude.

JUDGMENT.

12. After the evidence is heard, the brief filed, and the arguments concluded, the court will consider the case and as soon as convenient render judgment in the cause.

EXECUTION.

13. The party against whom judgment is taken will be allowed ten days from the date thereof to adjust or to pay same, and failing to do so the clerk shall, upon application of the successful party, issue an execution for the collection of the same, which said execution shall be placed in the hands of the marshal of the court, who shall proceed to collect the amount of said judgment, first, from the personal property, and secondly, or if there be no personal property, from the real estate of the judgment debtor and make due return to the court.

In case of personal property levied on for sale an advertisement shall be made of the date of the sale, giving a description of the property to be sold, and posted at the court-house door in the circuit in which said property is to be sold and at two other public places in said circuit for ten days prior to the date of sale.

In case of real estate the notice shall be posted as above set forth for at least thirty days, provided that in case of real estate the same shall be sold only at the court-house of the circuit in which it is located and on the first Monday of the month.

ATTORNEYS AT LAW.

14. Attorneys and others who practice in the courts must produce a power of attorney, in conformity with article 329 of the Judicial Code, provided that this power may be given verbally in the presence of the court, and a record made of the same.

All attorneys at law who were permitted to practice their profession within the territory of which is constituted the Zone on or before the 20th day of February, 1904, will be entitled to practice before the Zone courts upon presenting evidence of this fact and taking an oath to demean themselves properly and to comply with the rules and regulations and laws in force in said Zone during the time they shall so practice.

Any attorney producing in open court a license to practice law granted by any State in the United States of America will be admitted to practice in said court.

Other persons who desire to be admitted to the practice will appear before the supreme court, producing a certificate of good moral character, and be examined touching their qualifications to practice law. The subjects upon which they are examined will be real estate, personal property, equity, pleading, contracts, administrators and executors, criminal law, and the codes in force in the Zone.

If in the opinion of the court they exhibit a sufficient acquaintance with the subjects upon which examined to enable them to practice their profession with efficiency, a license to so practice will be issued to them.

DOCKETS OF SUPREME AND CIRCUIT COURTS.

15. A docket will be kept of cases in the supreme and circuit courts, and the same will be called in their regular order on court days.

The supreme court meets regularly on the second Mondays in January and July of each year, and at such other times as the justices of the supreme court shall determine is necessary for the disposition of public business. In this court attorneys will be permitted to file briefs and argue cases, and the rules given herein, so far as they are applicable, will be enforced.

ESTATES OF DECEASED PERSONS.

16. Where persons die intestate in the Canal Zone, leaving personal property, the estate shall be administered upon according to law; and the right to letters of administration shall be as follows: (1) The nearest relative of deceased, (2) the largest creditor, (3) a person selected by the court. The administrator shall qualify as such and execute a bond for the faithful performance of his duties. He shall make an inventory of the property and reduce the same to money, collect all debts, and pay off whatever may be justly owing by the estate.

The inventory shall be filed with the clerk of the circuit court in the circuit in which deceased died; and the account shall be filed with the judge of said circuit, who shall pass on the same, and, if found correct, order it recorded. The administrator shall show clearly all amounts received and expended, with the proper vouchers for such expenditures. This account shall be made at least once a year, and oftener if required. The clerk of each court shall keep two books as records for estates, in one of which shall be copied the inventory, and in the other the accounts as made by the administrator, and such other books, for orders, etc., as may be necessary.

The court may, in case no one will administer on the estate, appoint a trustee for that purpose, who shall likewise make the inventory and accounts, under the supervision of the court, as above set forth for administrators.

Provided, That this shall not affect the rights of the collector of internal revenue to take charge of the estates of American canal employees as regulated by law, nor that of duly accredited consuls in behalf of their countrymen, nor that of citizens of the Republic of Panama domiciled or temporarily within the Zone; in cases of such citizens of Panama, the collector of customs either at Panama or Colon, or any one duly authorized by the proper authorities of Panama, may take charge of such estates.

Recapitulation.

HISTORY OF A CIVIL CAUSE.

Every suit before the circuit court will be commenced by a memorial, and then a summons or notice to the parties will be issued; bond will be given by the plaintiff for costs; the defendant will answer or demur, and a day will be fixed for the hearing of the proof after the completion of the pleadings. The proof will be taken orally in open court; counsel for the plaintiff and defendant may orally argue the cause, or file briefs; after which the judge will, as soon as convenient, give his decision. In cases where necessary, execution shall issue; this will be placed in the hands of the marshal of the court, who will proceed to advertise property in order to satisfy the judgment entered in the cause. All pleadings filed will be on the ordinary legal size paper, written on one side; but stamped paper will not be used.

HISTORY OF A CRIMINAL CAUSE.

In all criminal matters persons will be informed against under, and trials conducted in accordance with, the Laws of the Canal Zone, a copy of which can be had by application to the executive secretary.

In the municipal courts the municipal judges will try and finally determine all criminal matters within their jurisdiction, and from their decision an appeal

REPORT OF THE ISTHMIAN CANAL COMMISSION.

101

can be taken to the circuit court; and the judges are advised to notify all parties at the date of rendition of the judgment of their right to such appeal, and to enter notice, in case asked to do so, of the intention of the defendant to appeal. Such appeal if taken will be to the circuit court having jurisdiction, and the trial will be held de novo.

In the circuit court parties will be tried either on being bound after preliminary hearing by a municipal judge, or warrant issued at the instance of the prosecuting attorney. In either case an information will be filed, parties arrested, day set for the trial, proof heard, and verdict rendered. On all matters of law an appeal from this court will be allowed to the supreme court.

Fee bill.

CIRCUIT COURT.

Filing memorial, answer or demurrer.....	\$0. 10
Issuing summons or subpoena.....	. 25
Serving summons	1. 00
Serving subpoena (for each name).....	. 25
Each judgment .....	. 25
Each examination .....	. 25
Administering each oath .....	. 05
Taking bond for costs, etc.....	. 25
Transmitting appeals .....	. 50
Continuing the cause.....	1. 00
Copy of memorial or other paper in the cause, per hundred words.....	. 10
Each notice .....	. 10
Issuing execution .....	. 25
Serving execution	1. 00
Advertisements, each .....	. 10
Any other paper in cause not mentioned.....	. 25
For each witness, per day.....	1. 00
For each witness, per mile, going and coming (for more than 3 miles).....	. 10

Each collection by marshal, 5 per cent of amount collected.

In each case the plaintiff, before the summons is issued, executes a bond of not less than \$25 for costs to be incurred, and each bond may be increased on proper notice by the court. Each party, plaintiff and defendant, shall pay the witness for each day's service, and may take their receipts and file them as a part of the costs in the case, to await final action in the cause.

SUPREME COURT.

Docketing appeal in supreme court.....	\$2. 00
Copies of statement of appeal, per hundred words.....	. 10
Trial fee	3. 00

Meeting of the circuit courts.

The circuit courts of the Zone will hold regular sessions in the various circuits at the following times and places:

- Ancon, the first Monday in each month.
- Gorgona, first Tuesday in each month.
- Empire, first Wednesday in each month.
- Cristobal, first Thursday in each month.

And at other dates if the business requires. All papers are returnable on the day and dates above given.

APPENDIX 8.—EXECUTIVE ORDER.

[Embracing the duties of governor and general auditor, covering the revenues and expenditures therefrom of the government of the Canal Zone, Isthmus of Panama.]

An order reciting Executive order of the President of the United States, requiring an accounting system for the government of the Canal Zone, Isthmus of Panama, prescribed with the concurrence and approval of the Secretary of War first had, rules and instructions relative to the accounting system of the government of the Canal Zone, Isthmus of Panama.

102 REPORT OF THE ISTHMIAN CANAL COMMISSION.

Whereas the President of the United States upon April 1, 1905, signed the following Executive order:

THE WHITE HOUSE,
Washington, D. C., April 1, 1905.

* * * The Commission is especially charged with the duty of maintaining a complete system of accounts on the Isthmus, which shall be duplicated in Washington, so that there may always be in Washington the proper means of informing the President, the Secretary of War, and the Congress of the amount of work done, the cost of same, the amount of money available, the amount of money expended, and the general financial condition of the enterprise. * * *

Now, therefore, by the authority of the President of the United States, and with the concurrence and approval of the Secretary of War first had, be it ordered by the Isthmian Canal Commission that—

SECTION I.

The following rules and regulations shall apply to the accounting system of the government of the Canal Zone, and shall take effect and be in force July 1, 1905:

Rules and instructions relative to the accounting system of the government of the Canal Zone, Isthmus of Panama.

THE GENERAL AUDITOR.

RULE 1. Pursuant to the provisions of section 10, act No. 8, Laws of the Canal Zone, the general auditor for the Isthmian Canal Commission and his duly authorized deputies shall receive, examine, and settle all accounts pertaining to the revenues and receipts derived from the Canal Zone and expenditures paid therefrom, and certify the balances thereon to the governor of the Canal Zone, and shall preserve the accounts and vouchers after settlement.

THE LOCAL AUDITOR.

RULE 2. In accordance with the circular (No. 15) of the executive committee of this Commission, and in further pursuance of section 10, act No. 8, Laws of the Canal Zone, the local auditor in charge of the accounts of the Isthmian Canal Commission, located on the Isthmus of Panama, shall discharge the duties and perform the services of the auditor for the government of the Canal Zone, and the acts of the local auditor, consistent with the prescribed regulations of the general auditor, shall be binding upon the general auditor until revoked or disapproved by overt act of the general auditor.

THE CHIEF CLERK.

RULE 3. There shall be appointed by the auditor, with the approval of the Isthmian Canal Commission, a chief clerk, who shall sign in the name of the auditor such official papers as the auditor may designate and perform such other duties as the auditor may prescribe.

He shall have charge of the bureau as acting auditor in case of death, resignation, sickness, or other absence of the auditor until his successor is appointed.

RULE 4. The expenditure of moneys received through Canal Zone revenue shall be made on properly prepared and approved vouchers, approval for payment to be made by the governor.

RULE 5. All receipts issued by the treasurer for deposits with the treasurer shall be in duplicate and shall be countersigned by the auditor. When so countersigned one receipt in every case shall be retained in the office of the auditor and the other shall be delivered or transmitted by the auditor to the person by whom the payment was made, after the same has been duly registered in all its particulars under proper headings.

RULE 6. The receipts retained by the auditor will constitute the necessary check in his examination and settlement of the accounts of the treasurer as the authority for charging the treasurer with moneys received, and such receipts will be filed in the office of the auditor with the accounts in which the credit is taken.

REPORT OF THE ISTHMIAN CANAL COMMISSION. 108

RULE 7. Vouchers paid by the treasurer, with the proper evidence of payment, which shall be the proper receipt of the payee thereon, shall constitute the vouchers upon which the treasurer shall receive credit for payments made, and at or the settlement of the accounts of the treasurer by the auditor the vouchers shall be filed therewith.

RULE 8. The auditor shall prescribe the forms for keeping and rendering all accounts subject to his examination and settlement, and issue all necessary instructions to the officers and agents rendering such accounts.

RULE 9. And in case any officer or agent whose duty it is to collect and receive moneys arising from the revenues of the Canal Zone, of whatever kind, and to make disbursements of such moneys for any purpose, shall fail to render complete accounts of such receipts and disbursements to the auditor, or to transmit the same within five days after the expiration of the month to which they pertain, or shall neglect to render the same when requested so to do, it shall be the duty of the auditor forthwith to report such case to the governor for proper action.

RULE 10. There shall be in the office of the auditor a division of bookkeeping, in which shall be kept proper books of entry and ledgers for recording the general accounts of the receipts and expenditures pertaining to the revenues of the Zone, and the personal accounts of agents and officers authorized to collect the same, and the disbursement of moneys by the treasurer upon vouchers as herein provided, and of all other accounts or claims allowed and certified by the auditor, including accounts of appropriation. The system of bookkeeping adopted by the auditor shall be a double-entry system.

ACCOUNTS OF TREASURY DEPOSITS AND WITHDRAWALS.

RULE 11. The receipts issued by the treasurer for moneys received on deposit, before being countersigned by the auditor, shall be entered in a ledger of treasury receipts as funds deposited, as postal receipts, internal-revenue receipts, miscellaneous receipts, or as payments or repayments to appropriations, or any sub-heading of these classes of deposits as may seem proper, respectively, and in making such entries from the treasury receipts the number and date of the receipt and the name and official designation, if any, of the person by whom the deposit was made shall be noted. These funds shall thereupon be treated as one fund, known as the general fund, from which all appropriations from "moneys in the treasury not otherwise appropriated" shall be made.

RULE 12. All vouchers shall be charged against the available fund and against the account of the service and appropriation for which such voucher is drawn, and in making such debit entries the number and date of the voucher and the name of the person, with official designation, if any, to whom paid shall be noted. The auditor shall so keep his record as to be able to show at any time the amount of money disbursed on account of any appropriation, as shown by the voucher issued and by the accounts as audited.

REVENUE ACCOUNTS.

RULE 13. All officers or agents authorized to receive and collect moneys arising from the revenues of the Canal Zone, of whatsoever kind, shall be required to pay the full amounts received and collected by them, respectively, to the treasurer, and to render to the auditor monthly accounts therefor within five days after the expiration of the month to which they pertain, accompanied by proper itemized and certified statements and returns of the revenue collected, showing when, by whom, and on what account collected.

RULE 14. In the rendition of such revenue accounts the officers or agents will charge themselves with all revenues received and collected during the period covered by the account and take credit for the amounts paid to the treasurer as shown by the duplicate receipts in their possession and countersigned by the auditor, the number and date of such receipts being noted in the entries of amounts paid to the treasurer. These duplicate receipts will be retained by the officer or agent claiming credit therefor.

RULE 15. In the audit of such revenue accounts the auditor shall compare and check the treasury receipts of record in his office with the corresponding entries in the account of the officer or agent as rendered, making proper notation in the treasurer's account of the counter credit to the depositor.

RULE 16. All revenue accounts shall be rendered and kept separately under the appropriate funds or heads of account to which they respectively pertain; that

is, all revenues arising in the department of post-offices under the head of postal receipts; all revenues derived from internal taxes and duties shall be entered under the head of internal-revenue receipts; all revenues from other sources under the head of miscellaneous receipts, and all refunds for overpayment under the heading of repayments.

RULE 17. All officers or agents of the government of the Canal Zone whose duty it is to collect and receive revenues or other moneys and deposit the same in the treasury shall make deposits or remittances of same, regardless of the amount received or collected, as often as once a month where safe and possible, and if there is no opportunity for such remittance within the month, as soon as possible thereafter, and a deposit shall be made in every case as soon as possible where the revenues or moneys in the hands of any officer or agent amount to two hundred dollars United States currency or its equivalent in local currency: *Provided*, That no such officer or agent shall be required to make a deposit oftener than once a day: *And provided further*, That postmasters who are authorized to issue and pay money orders shall remit by registered mail to their designated depository all sums received by them from sale of money orders in excess of their authorized reserve or the amount of the advances of unpaid orders on hand less than two weeks, such remittances to be made with each and every mail dispatch from their respective offices which may convey mail to the treasurer.

RULE 18. Claims of officers or agents whose duty it is to collect or account for public money, for losses of funds in transit, by fire, burglary, or other unavoidable casualty shall be submitted to the auditor within one month after such loss occurs, with all the evidence in the case, immediate advice of the fact to be sent to the auditor pending forwarding of complete report. If the auditor shall find that the said funds were properly in the hands of such officer or agent, or properly remitted, or that the loss resulted through no fault of said officer or agent, he may, *with the written consent of the governor*, credit the account of such officer with the loss: *Provided*, That in no case shall a credit in excess of one thousand dollars be given in this manner. Claims for losses in excess of one thousand dollars shall be submitted through the auditor and governor for relief by action of the Isthmian Canal Commission.

RULE 19. The auditor may, with the written consent of the governor, mitigate, remit, remove, compromise, release, or discharge any liability, in whole or in part, to the government, in any matter before him, when, in his judgment, the interests of the government seem to require it, subject to such restrictions as may be provided by law.

RULE 20. The auditor shall supervise the collection of all debts due the government of the Canal Zone through the usual civil or judicial channels, and institute all such measures as may be authorized by law to enforce the payment of such debts and recovery of all amounts found to be due said government in connection with his settlement and adjustment of accounts.

MONEY-ORDER ACCOUNTS.

RULE 21. The auditor shall keep the accounts of the money-order business separately and in such manner as to show the number and amount of money orders issued at each post-office, and the number and amount paid and the fees received. The auditor shall certify quarterly the receipts as fees from the sale of money orders and require the same to be deposited with the treasurer of the Zone as postal receipts. Losses of money-order funds in transit, by fire, burglary, or other unavoidable casualty, for which credit may be given, shall be deducted from the fees collected before the quarterly transfer to the depository of such fees as postal receipts.

RULE 22. Transfers of money from postal receipts to money-order funds may be made by the postmaster, under such regulations as the auditor may prescribe, when his receipt from the sale of money orders is insufficient to pay the money orders drawn upon his office. Credit for such transfers of postal funds to money-order funds will be taken in the monthly postal account of the postmaster. At the close of each quarter all such transfers of funds from postal to money-order accounts shall be deposited by the director-general of posts, or other officer in charge of postal affairs, with the treasurer of the Zone, as revenues for the service of the division of posts upon certification of the auditor of the amount of such funds to be so deposited.

RULE 23. The treasurer of the Canal Zone shall be required to keep an account of money-order funds deposited by postmasters with him to the credit

of the director of posts, subject to his official draft, when countersigned by the local auditor, drawn for needful advances to postmasters of funds with which to pay money orders lawfully drawn upon them; and it shall be the duty of all postmasters to make prompt remittance to the treasurer of the Zone of all money-order funds, including all fees thereon, in their hands not needed to meet drafts of which they have notice, the same to be deposited to the credit of the director of posts as money-order funds.

JURISDICTION OF THE AUDITOR.

RULE 23. The jurisdiction of the auditor for the Canal Zone over accounts and all vouchers pertaining thereto shall be exclusive. His decision shall be final and conclusive upon administrative branches of the government, except that appeals thereon may be taken by the party aggrieved or the head of the department concerned within one year in the manner prescribed in Rule 36. The auditor for the Zone shall, except as herein otherwise provided, have like authority as that conferred by law upon the several auditors of the United States and the Comptroller of the United States Treasury, and is authorized to communicate directly with any person or officer having claims before him for settlement, or with any officer or department having official relations with his office.

REPORTS.

RULE 24. The auditor shall forward to the Secretary of War, not later than ten days after the expiration of each month, a full and complete report of all money received by the treasurer during the preceding month, as shown by the entries made from the treasury receipts retained in the auditor's office; a statement of all payment of moneys made on vouchers during the preceding month, and an itemized statement of all other accounts covering receipts, disbursements, and expenditures audited during the preceding month.

DEPOSITARY OF CANAL ZONE.

RULE 25. The treasurer of the Canal Zone shall keep a properly detailed account in permanent books of record of moneys received by him, which shall be entered under appropriate heads, with the name of the agents, officers, and persons from whom received and the dates of receipt.

RULE 26. All moneys received by the treasurer shall be credited, respectively, as deposits on account of post-office receipts, as deposits on account of internal-revenue receipts, on account of miscellaneous receipts, in accordance with the invoice accompanying the fund, which in all cases shall indicate the proper heading or classification under which the fund shall be credited.

RULE 27. The accounts of the treasurer and of all officers and agents of the Canal Zone shall be kept in the money in which it is received and disbursed, but in all reports to the Secretary of War the amounts therein shall be stated in the money of the United States at the authorized rate of conversion.

RULE 28. The treasurer shall issue receipts in duplicate for all moneys received, which shall be numbered consecutively and shall bear the date upon which the deposit is actually made, and show from whom and what account received and the amounts in money of the United States; and also, when paid in any foreign coin or currency, the amounts and kind of foreign money in which payments are made shall be stated upon the receipts and the rates at which the same are reduced to money of the United States.

RULE 29. All receipts, original and duplicate, issued by the treasurer shall be registered and countersigned by the auditor of the Zone, without which they shall be invalid, and for this purpose the treasurer shall, immediately upon issuing each receipt in duplicate, transmit both receipts to the auditor.

RULE 30. No payment shall be made by the treasurer except upon vouchers approved by the governor and registered by the auditor, and such vouchers, when paid and accompanied by proper evidence of payment, which shall be the receipt of the payee, shall be the voucher upon which the Treasurer shall receive credit in the settlement of these accounts.

RULE 31. The treasurer shall render monthly accounts of the receipts and payments for account of the government of the Canal Zone, and submit the same to the auditor for examination and settlement not later than ten days after the expiration of each month. In rendering such accounts the treasurer

shall charge himself with all moneys received during the period covered by the account, under the appropriate funds or heads of accounts.

RULE 32. The treasurer shall take credit for all moneys paid out, and file with the account the vouchers properly canceled.

RULE 33. The treasurer of the Canal Zone shall give bond with sufficient surety, to be approved by the Isthmian Canal Commission, for the faithful performance of the duties herein prescribed, and for the full payment on demand of all balances found due, in such amount as shall from time to time be fixed by the Commission.

RULE 34. The auditor shall make semiannually, and oftener if deemed expedient, an examination of the books and accounts of the treasurer of the Zone, and also an examination and count of the moneys in the hands of the treasurer, and such other pertinent matters as may be desirable, and submit his report thereon to the governor and Secretary of War.

TITLE TO BE OBSERVED IN THE RENDITION AND CERTIFICATION OF ACCOUNTS.

RULE 35. All accounts of the treasurer of the Zone and of the various officers and agents authorized to collect the revenues, receive moneys, and make disbursements, and all other accounts subject to examination and settlement by the auditor shall be with "the government of the Canal Zone," and all balances certified by the auditor shall be certified as due to or from said government, as the case may be.

APPEALS FROM THE ACTION OF THE AUDITOR.

RULE 36. Any person aggrieved by the action or decision of the auditor in the settlement of his account or claim by that officer may within one year take an appeal in writing to the governor, which shall specifically set forth the particular action of the auditor to which exception is taken, with the reasons and authorities relied on for reversing such action. If the governor shall confirm the action of the auditor, he shall so indorse the appeal and transmit it to the auditor, and the action of the auditor shall thereupon be final and conclusive. Should the governor fail to sustain the action of the auditor, he shall forthwith report his ground of disapproval to the Secretary of War, together with the appeal and the papers necessary for a proper understanding of the matter. The decision of the Secretary of War in such case shall be final and conclusive.

RULE 37. As soon after the close of each fiscal year as the accounts of said year may be settled and adjusted the auditor shall submit to the governor, the Isthmian Canal Commission, and Secretary of War an annual report of the financial concerns of the government of the Canal Zone, showing the receipts and disbursements of the various departments of the said government of the Canal Zone, and make such other reports as may be required of him by the governor, the Canal Commission, or the Secretary of War.

RULE 38. The auditor shall, at the time of settlement, send an official notification in writing to each person whose accounts have been settled in whole or in part in the auditor's office, stating the balances found due thereon and certified, and the differences arising on such settlement by reason of disallowances or suspensions made by the auditor, or from other causes, which statement or differences shall be properly itemized. The reason for a disallowance or suspension of credit shall in all cases be stated.

RULE 39. A true copy of all orders of the government of the Canal Zone which may originate a claim or in any manner affect the settlement of any account shall be transmitted to the auditor by the proper officer.

RULE 40. Every contract under which a payment may be made shall be submitted to the auditor with the account to which such payment pertains.

RULE 41. Wherever the word "auditor" appears herein it shall be taken to mean the general auditor for the Isthmian Canal Commission and his authorized corps of deputy auditors or local auditors to whom duties have been regularly assigned.

All orders of the governor and acts of the Isthmian Canal Commission, or parts thereof, which are in conflict with this order are hereby repealed.

Approved, for the President:

WM. H. TAFT.
Secretary of War.

NOVEMBER 5, 1905.

APPENDIX 9.—ESTIMATES OF EXPENDITURES OF THE DEPARTMENT OF GOVERNMENT AND SANITATION FOR THE YEAR 1905.

Executive office:		
Salaries.....	\$100,000	
Salaries and miscellaneous expenses.....	5,000	
		\$105,000
Health department:		
Salaries.....	850,000	
Supplies and miscellaneous expenses.....	150,000	
Buildings.....	425,000	
		1,425,000
Department of revenues:		
Salaries.....	100,000	
Buildings.....	25,000	
Postage stamps.....	45,000	
Transportation of mail.....	15,000	
Supplies and miscellaneous expenses.....	15,000	
		200,000
Judiciary:		
Salaries.....	38,000	
Supplies and miscellaneous expenses.....	4,000	
Buildings.....	23,000	
		65,000
Prosecuting attorney's office:		
Salaries.....	15,000	
Supplies and miscellaneous expenses.....	1,000	
		16,000
Police department:		
Salaries.....	150,000	
Buildings.....	75,000	
Supplies and miscellaneous expenses.....	35,000	
		260,000
General buildings.....		
		450,000
Total.....		2,521,000

APPENDIX 10.—OFFICERS OF THE GOVERNMENT OF THE CANAL ZONE.

Executive department.—Charles E. Magoon, member of Commission, governor; H. D. Reed, executive secretary; C. H. Baker, private secretary, assistant secretary of the Commission; Rufus A. Lane, detailed as chief, division of municipalities.

Judicial department (supreme court).—F. Mutis Duran, chief justice; Hezekiah A. Gudger, associate justice; Lorin C. Collins, associate justice; J. M. Keedy, prosecuting attorney; G. M. Shontz, assisting prosecuting attorney; Inocencio Gallardo, legal adviser; Walter Emery, clerk first judicial circuit; Hunter L. Johnson, clerk second and third judicial circuits.

Department of health.—Col. W. C. Gorgas, U. S. Army, chief sanitary officer; Capt. P. F. Straub, U. S. Army, executive officer; Surg. H. R. Carter, U. S. P. H. and M. H. S., director of hospitals; Maj. John L. Phillips, U. S. Army, superintendent Ancon Hospital; Surg. H. C. Curl, U. S. Navy, superintendent Colon Hospital; Surg. J. C. Perry, U. S. P. H. and M. H. S., chief quarantine officer; Dr. M. E. Connor, assistant quarantine officer, Panama; Surg. Claude C. Pierce, U. S. P. H. and M. H. S., quarantine officer, Colon; Dr. John H. Purnell, acting health officer, Panama; Dr. Ernest H. Wheeler, health officer, Colon and Cristobal; Joseph A. Le Prince, chief sanitary inspector of the Canal Zone; Dr. Arthur I. Kendall, acting chief of laboratory.

Department of revenues (including customs, posts, schools, and lands).—Tom M. Cooke, collector of revenues; E. Lewis Baker, deputy collector, Colon; H. A. Gudger, deputy collector, Ancon.

Police.—George R. Shanton, chief of police; Lieut. Laurance Angel, U. S. Army, first lieutenant; Lieut. Stanley S. Ross, U. S. Army, second lieutenant.

Auditing.—W. B. Starke, auditor of Zone.

Treasury.—Paymaster Geo. C. Schafer, U. S. Navy, treasurer of Zone.

* Estimated cost of purchase of postage stamps from the Republic of Panama, to be surcharged and sold in the post-offices of the Canal Zone. Under Executive order of December 3, 1904, the stamps are purchased from the Republic at 40 per cent of their face value in United States currency.

EXHIBIT B.

REPORT OF THE CHIEF ENGINEER.

**ISTHMIAN CANAL COMMISSION,
DEPARTMENT OF CONSTRUCTION AND ENGINEERING,
Ancon, Canal Zone, Isthmus of Panama, September 30, 1905.**

SIR: I have the honor to submit the following as general report of operations and conditions affecting the departments of construction and engineering for the three months ending September 30, 1905, or the first quarter of the present fiscal year.

Although my appointment as chief engineer of the Isthmian Canal Commission was of July 1, 1905, I did not arrive on the Isthmus until July 26 to assume active charge of the operation of the department of construction and engineering.

My first steps were, naturally, to become sufficiently acquainted with the then existing situation to enable me to determine whether any changes in organization, methods of operation, or personnel seemed necessary.

A close observation soon made it clear to me that an abnormal state of feeling existed among many of our employees, manifesting itself in lack of interest, absence of harmony, not only between different departments, but between divisions of the same department. The general expression, implied if not directly indicated, was one of discouragement, amounting almost to indifference. This situation had arisen, I judged, from several causes, among them being the sudden changes in executive officers, with the consequent usual crop of senseless rumors and natural fear of the results of a possible epidemic of disease; but more than any other cause seemed to be the grounded impression that the policy which was being pursued in carrying out the work was not a successful one, and that only failure could be expected.

This last assumption was not at all warranted, as, while undoubtedly mistakes had been made, as there always will be in carrying out work of such magnitude no matter who may be at the head of its departments, there is always the chance for an honest difference of opinion, both as to methods and results.

I found very much good work done and in progress as to sanitation, repair and building of quarters, construction of sewers, water-works, and other necessary adjuncts. The work on the canal prism proper was largely in the nature of experiments, while the data thus gathered was not of such a character, in my opinion, that correct and conclusive results could safely be deduced from them owing to several causes, among these causes being poor equipment, poor tracks, unsuitable dumping grounds, and piecemeal work generally. All these causes, added to an undoubted lack of force and a discouraged feeling among the personnel, made all attempts to produce good results an impossibility.

REPORT OF THE ISTHMIAN CANAL COMMISSION.

109

My first efforts were directed to outlining such an organization of the department as best seemed to me to enable the situation to be clarified, simplified, and placed on such a basis that the duties of every official, of whatever rank, should be so clearly defined and his consequent responsibility so clearly apparent that only a negligent or willful interpretation of its rules could produce unsatisfactory conditions, and these merely temporary. The short trial that has been made with this organization has convinced me that with some slight modifications it is well fitted to, and will, accomplish what was intended.

Another and very important step was to secure the confidence of employees, not only personally but along such lines as would induce faith in themselves and in the work they were enlisted upon, and to make them feel that their interests were one with the Commission and with the work. There can be no doubt but what this has been accomplished to a remarkable degree, and that better and quicker good results will be evident from day to day.

Very few changes in the personnel of officials and employees have occurred, and the average ability and effectiveness, outside of our common labor, would be well up to the standard which obtains in the United States if more discretion had been exercised in many cases in making selections and appointments. Conditions of climate and environments are so different from what most of our men have lived under in the past that necessarily unusual care must be taken in the filling of positions in all grades of employees.

You have been furnished copies of the present organization, and while it has not been fully developed, enough has been put in force to care for present necessities, and any changes or modifications to be made in the future will depend largely upon the character and amount of work finally decided upon to be done—in other words, upon the type of the canal.

Below find some detail of the work of the various divisions during the period above noted.

BRANCH OF LABOR AND QUARTERS.

This branch has charge of the hiring of all grades of employees and of assigning them to the various departments as they may be needed, of providing and assigning them quarters, of supervising and directing the proper furnishing and the care of such quarters, and of keeping a general personal record of all employees. It also directly handles all hotels and mess houses, and has general charge of all buildings on the Canal Zone belonging to the Isthmian Canal Commission.

On July 31, 1905, the force account was as below:

Department.	Gold.	Silver.	Total.
Construction and engineering.....	\$1,148	\$4,170	\$5,318
Government and sanitation.....	418	1,064	2,383
Material and supplies.....	119	887	1,006
Grand total.....	1,685	7,081	8,766

On September 30, 1905, the force account was as below:

Department.	Gold.	Silver.	Total.
Construction and engineering.....	\$1,378	\$7,147	\$8,525
Government and sanitation.....	526	1,819	2,345
Material and supplies.....	222	1,898	2,120
Grand total.....	2,126	10,864	12,990
Increase for the period.....	441	8,850	9,291

But of this increase, about 20 per cent is due directly to the fact that we are not permitting idle men to remain in the camps, and the policy is strictly followed that if laborers do not choose to work fairly constantly they are not allowed the use of Commission quarters.

DIVISION OF MUNICIPAL ENGINEERING.

This division has charge of the designing and construction of waterworks and sewers, not only in Panama and Colon, but over the entire Canal Zone wherever such are needed, with also the care and maintenance of same, with the construction and repair of roads and work of like character.

Of its more important work it carried out during the three months ended September 30:

Panama waterworks.—Laid cast-iron water pipe as follows:

	Linear feet.
In July.....	3,242
In August.....	4,297
In September.....	2,317
Total.....	9,856

At present date 55 per cent of the entire work of installing this plant is completed.

Ancon reservoir.—Was practically completed, all the necessary concrete work being done, and it is expected to be put into service October 15.

Thirteen thousand linear feet of the Rio Grande main supply pipe line has been back filled and considerable work done on the Rio Grande reservoir in the way of strengthening, completing same.

House connections, both of water and sewer, have been established in Panama from the railroad station to the Cathedral Plaza, and this work is rapidly proceeding.

Colon waterworks and sewers.—No water or sewer pipe has been laid. The forces at that point have been engaged in the construction of a temporary dam at Brazos Brook, which will supply Colon with water until a permanent reservoir is completed, and as the temporary plant is a part of the general scheme of furnishing this water none of the work which is now being done on it will be lost. Quarters for foremen and engineers and for 200 laborers have been built and the construction gotten well under way. All material has been ordered, and it is expected soon to be delivered on the ground, and it is believed the water needs of Colon will be provided for during the next dry season.

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At Cristobal 3,850 linear feet of water pipe have been laid and 1,500 linear feet of concrete drains rebuilt and a lot of house connections made.

Ancon Hospital.—One thousand four hundred and thirty linear feet of all sizes of pipe laid, about 20 per cent of the work authorized.

La Boca.—The supply-pipe line to Ancon reservoir has been tapped, and 1,000 feet of water pipe laid connecting with the former La Boca supply line, thus furnishing La Boca with water for its present needs.

Culebra water supply.—Two thousand five hundred linear feet of pipe has been laid, and 47 house connections made. Work on Comacho dam is well under way, a supply track having been laid from the Panama Railroad to the dam site, $1\frac{1}{2}$ miles in length, and 25 acres of clearing at the site of the dam been completed, about 50 per cent. Excavation and grading work on the reservoir is now in progress.

Empire.—A total of 1,600 linear feet of pipe has been laid, enough for present needs. Twenty-seven house connections have been made. One 3,000-gallon water tank and one pump have been set up, and the above are now in service.

Las Cascadas.—An old French pump has been overhauled and put into service, and 3,000 linear feet of pipe taken up, cleaned, and relaid, and all the work necessary for present needs is completed.

Gorgona.—All work on the reservoir excavation is completed. One thousand cubic yards of excavation has been done, and 10,038 linear feet of water pipe laid, and 11 house connections established. Four thousand feet of temporary supply track has been laid and a large amount of other necessary work done.

Corozal.—Two thousand nine hundred and eighty-five linear feet of water pipe laid, enough for present requirements.

Paraiso.—Two thousand five hundred linear feet of water pipe laid.

Pedro Miguel.—One thousand six hundred and fifty linear feet of water pipe laid, enough for present requirements.

SEWERS.

Panama.—Work on the sewerage system of Panama is progressing in fairly good shape, and at present date 62 per cent of the total work as approved was done. During the three months of time there was put in 13,065 linear feet of sewers, and a vast number of house connections.

Culebra.—There was a total of 5,300 linear feet of sewers laid during the period.

Empire.—There was laid a total of 6,876 linear feet.

Corozal.—There was laid a total of 3,690 linear feet.

Work on all sewers is progressing rapidly, and at outlying points has generally been sufficiently advanced to care for present needs.

ROADS.

On the La Boca road a total of 6,140 linear feet has been completed, all the work at present necessary.

On the Savanas road a total of 5,036 feet has been completed, about 15 per cent of the total amount to be done.

The character of the work on these roads is to thoroughly regrade and drain same, put in new or additional permanent culverts and bridges wherever they are needed, and to thoroughly macadamize the roadway with broken stone.

About 1,000 feet of heavy road work was completed on Ancon Hill, and the old French road from Panama to Corozal was cleaned and drained, and the work of rebuilding it will shortly be undertaken.

PAVING.

At Panama, although no actual work was done excepting a small amount of grading, preparations were made to receive the paving brick and other material, which are soon expected, and on their arrival the work will be promptly inaugurated.

The force account of the division of municipal engineering on July 1, 1905, and on September 30, 1905, was as follows:

Date.	Gold (monthly).	Gold (hourly).	Silver.	Total.
July 1, 1905.....	\$90	\$25	\$988	\$1,109
September 30, 1905.....	141	21	1,675	1,837

A very large amount of material and supplies of all descriptions for the use of this division has been ordered—enough, with proper dispatch in point of delivery, to prevent delay to the work due to the absence of such material.

DIVISION OF BUILDING CONSTRUCTION.

This division is charged with the preparation of plans and estimates for and the construction and repair of all buildings on the Canal Zone. During this period plans and estimates for 45 structures have been completed and work done on a large number of plans which are still uncompleted.

Repairs have been authorized to 517 buildings, 195 of which have been completed and 2 demolished.

Work has continued on buildings already under construction and a number of new buildings have been put under construction; not as many as desired, owing to the serious lack of material.

During this period requisitions were made for 4,042,487 feet B. M. of lumber, and but 1,878,496 feet was delivered, nearly all of which was consumed in repair work.

Up to July 1, 1905, the construction of 210 buildings had been authorized. Since that time some 85 more have been authorized; and of this total number 120 are now in course of erection, and about 175 have not been begun owing to a variety of causes, principally lack of material.

A detailed list of all work of this division during the period would be too long for this report, but there is hardly a spot on the Canal Zone where it has not done work of more or less importance, ranging from heavy repairs, amounting in many cases to a reconstruction of large and important buildings, to the thousand and one smaller repairs necessary and incident to the rehabilitation of the buildings of the

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Commission, and this work has very largely been done under extreme stress, arising from the necessity for proper housing and caring for thousands of men, from inefficient colored so-called "skilled" labor, and from lack of material.

The division is now, however, so organized and supervised, and is beginning to receive material in large enough quantities (although not properly classified as yet), as to encourage me in the belief that its effectiveness is beginning to be felt in a marked degree.

Very much, however, remains to be done, as it is a tremendous task to provide for the proper housing, in view of the very rigid requirements of the sanitary officials and the very liberal and proper policy of the Commission, of the army of men required in the execution of this work under the conditions and in this latitude.

The entire force of this division has ranged from 1,700 in July to 2,350 in September.

MECHANICAL DIVISION.

The work of this division before July 31 largely consisted in repairs to old French and Belgian locomotives and French 6-yard side-dump cars, of which a large number had been repaired for service and a large amount of money spent on same. This policy was at once discontinued, and only enough of such work ordered done since July to enable necessary equipment to be provided for such work as was deemed advisable to continue.

The force account of this division was: June 30, 1,017; July 31, 905; August 30, 745; September 30, 726; and a comparison of pay rolls shows as follows: June, \$49,525; July, \$47,399; August, \$44,691; September, \$41,659—a decrease of \$7,866 in September as compared with June. However, \$2,423 previously carried on the Culebra division work was added to the mechanical division rolls in September, thus making the actual decrease in the rolls \$10,289. These rolls have been increased somewhat by the temporary utilization of high-priced steam-shovel men who were temporarily released from their proper duties owing to the shutting down of certain of our shovels.

The work of the division has covered a multitude of items, such as the erection of 200 steel flat cars, 24 dump cars, 7 steam shovels, 4 earth spreaders, general repairs to 10 locomotives, repairs to a lot of small dump cars, also to a large lot of steam drill boilers, and heavy and light repairs to almost every class of machine in the Canal Zone. It has made 164,000 pounds of iron and 11,300 pounds of brass castings, and has made and repaired machines and tools in large numbers for every division and department on the work.

This division has also, until recently, been charged with the construction of shops at Cristobal and Matabachin, consisting of boiler, blacksmith, car repair, planing mill, erecting office, foundry, tool rooms, coke storage, carpenters' building, pattern and other necessary buildings at each place, all of which work is in a good stage of progress. It has installed a total of 282 new machines and tools during the period.

It has under order a large list of new equipment, as 300 steel flat cars, 120 new locomotives, 800 wooden flat cars, 31 steam shovels, 6 earth spreaders, 6 heavy unloaders, 12 ballast plows, 4 locomotive

cranes, 12 water columns, 24 dump cars, 1 100-ton steam wrecker, and 2 60-foot steel turntables.

A large amount of labor has been expended in clearing shop sites of old, obsolete French machinery. At the present time, owing to the building of new shops and repairs to old ones and the arrival of a large amount of new machinery during a limited space of time, the situation in and around the shops looks chaotic. But it is expected shortly that it will present a better appearance, and all our new machinery will be in an operative condition.

COLON DIVISION.

Covers all works of technical engineering and construction pertaining to the canal from Bohio to the Caribbean Sea, and the work during the period has consisted of surveys, borings, dredging, repair and construction of floating equipment, and a lot of track work, the latter now transferred to the Panama Railroad Company.

In detail the technical engineering work has consisted of general surveys to locate the existing canal, the Panama Railroad, diversion channels, and of topography of the country covering a possible relocation of the railroad. Many soundings have been made to properly chart the canal, particularly at its entrance, and test borings in the canal and the diversions to a depth of 45 feet have been made in large numbers.

A careful topographical survey has been made of Colon and Cristobal, showing the location of all tracks, buildings, piers, and other features, and maps showing the data thus gotten have been prepared.

Numerous bench marks have been established, and a duplicate line of levels has been run between mean low tide at Cristobal and Bohio. Cross sections on lines 100 feet apart for a distance of 1 mile from Cristobal up the canal and calculations from these have been made looking to obtaining necessary data in reference to an inner harbor. And many test holes in the coral rock and indurated clay have been put down in this locality.

Until September 1 the supervision of all track work at Cristobal was under this division. At that time it was transferred to the Panama Railroad, but prior to that date all the old tracks were repaired and put into serviceable condition and quite an amount of new trackage was constructed.

Up to September 1 the supervision of all wharf and dock work was also under the charge of this division, during which time two timber and pile docks, each 800 feet in length, were nearly completed and placed in service at Cristobal.

One of the old French ladder dredges has been in continuous operation during this period, dredging the channel at the mouth of the canal and at the piers and slips at Cristobal and Colon, and during the three months 160,000 cubic yards of material have been removed and handled in self-propelling barges, an average distance of 2 miles, and deposited on the west side of Limon Bay. As a result, in addition to the work in Colon piers a channel has been excavated to a minimum depth of 25 feet, extending from Colon Point a distance of 3,500 feet up the canal.

A comparatively large amount of work has been done to floating equipment to keep it in serviceable condition, in addition to which a steam launch has been about completed.

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A small machine shop is being erected near the old dry dock, to be equipped with tools necessary for hull work and light machine work generally, the machinery for which has all been ordered.

Orders have also been placed for one large ocean-going tug and for 11 steel barges, all of which are badly needed. Contracts have also been made for 2 modern dipper dredges, delivery to be completed about May, 1906. One of these dredges is for service at Colon and the other at La Boca, on the Pacific side, as the keeping open of both of these ports is now directly dependent on the only two dredges which we have been able to put into service, same being old French dredges which we have repaired. Work has all been delayed on this division more or less owing to lack of material of all kinds.

LA BOCA DIVISION.

Covers the work on the canal proper from the Pacific Ocean to Miraflores, and the operation of a small machine shop and marine ways for the repair of floating equipment at La Boca.

La Boca being under quarantine restrictions part of the period, our work was seriously delayed, and after the quarantine was raised there was quite an amount of sickness, which tended to delay matters still further.

Surveys of the canal proper, soundings, and tidal observations have been taken, and some borings are now in progress at the harbor entrance and across the entire valley of the Rio Grande. A topographical survey of the vicinity of La Boca has been made, showing the location of tracks, buildings, piers, etc.

During the entire period one of the old French dredges has been at work deepening and enlarging the channel leading to the steel pier, in deepening the basin, and in dredging in front of the new 800-foot timber pier which is just being completed. One hundred and forty-five thousand cubic yards has been removed from the basin and 111,000 cubic yards from the channel, a total of 256,000 cubic yards in the three months. All this material has been moved in barges to the west of Naos Island, a distance of 4 miles.

In front of the new pier there is a depth of 24 feet at low spring tide, with a width of 120 feet; in front of the railroad steel pier a depth of 26 feet, with a width of 165 feet.

Soundings taken along the channel entrance from the steel pier out to the crest of the bar on August 1 indicated a least channel depth of but 15 feet at low spring tide.

The basin in front of the steel pier was dredged in December, 1904, and during that time soundings showed a least depth of 26 feet, with an average of 27 feet. On May 30 there was an average of 20.2 feet, on June 30 an average of 18.7 feet, on July 31 an average of 16.8 feet, and during August it was necessary to dredge the entire basin and channel to permit ships to unload and load at the steel pier.

Shop and marine work at the plant and ways has consisted wholly of repairs to old floating equipment. One self-propelling barge has been entirely rebuilt; another one has been given heavy and another one light repairs. A 55-foot steam launch is being entirely rebuilt, the work remaining to be done being only to install new boilers, not yet arrived, and in putting on the upper works. Repairs have been made to electric cranes of the Panama Railroad docks, and other small but necessary work handled.

CHAGRES RIVER SURVEYS.

During the period a force of engineers has been engaged in taking topography on the line of the proposed Gatuncillo tunnel and of the proposed Dique open cut. Sixty-seven miles of transit and 120 miles of compass and level lines were run during July and August. A great deal of office work has been done, bringing the plans and records up to date, and an estimate, with maps and profiles of the open cut and tunnel, has been completed. Camps have been built and 10 miles of new trail for packing supplies constructed.

Field engineering work, consisting of topographical notes necessary for making contour maps of the country along the Chagres and Frijoles rivers has been pushed. Duplicate lines of levels from Bohio to Bas Obispo have been run, and many permanent bench marks established.

DIVISION OF MAP MAKING AND LITHOGRAPHY.

The principal work of this division has been the making of maps of all the encampments and the Isthmian Canal Commission buildings on the Isthmus. General geological profiles of the canal line; maps of sections of soundings at La Boca; complete maps of the canal region; map of Chagres River from Gamboa, upper Pequini; sketches showing bench marks on upper Chagres, Dos Bocas, Pelo Grande, and Pihiva; blueprints and tracings of old maps; large and small maps of Panama city; maps of proposed boundary line between the Republic of Panama and Costa Rica (for the Panaman Government), and many other plans and maps for the different departments and divisions, as required, with tracings and blueprints of all the above-mentioned maps.

The work of lithography has progressed well, having produced work in five colors, and with the new press, which has not yet been installed, we will be able to handle successfully all such necessary work.

On August 1 the printing, bookbinding, etc., was turned over to the bureau of material and supplies; but previous to that time, in July and August, there were turned out 591,930 copies of circulars, blank forms, etc.

DIVISION OF METEOROLOGY AND RIVER HYDRAULICS.

This division was reorganized on September 1, and is now, I believe, in shape to efficiently perform the work assigned to it.

The sections used since the French company established observations on the Chagres are now being resurveyed and all tabulations needed will be made immediately.

New sections for gauging with current meters are laid out, and the installations necessary will be made promptly on arrival of material. Rating tables, with corresponding discharge curves, have been carefully prepared to enable the calculation of the bihourly discharge from the Chagres River from May, 1904, and complete record to date.

The necessary technical instructions covering the care and operation of self-recording rain gauges and current meters have been given the

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different observers, and already a marked improvement is shown in the uniformity and accuracy of reports. A permanent rating station has been established at Bohio, so that the experiments can be quickly and efficiently performed.

The question of sedimentary matter and of evaporation is receiving proper attention, and valuable data in these directions will be collected.

The tide gauge formerly installed at La Boca has been thoroughly repaired, tested, and has been installed at Naos Island, where it will be free from local influences, such as sudden changes from the Rio Grande River.

Fluviograph stations at Bohio, Gamboa, and Alhajuela have been repaired and put in proper order, with the necessary quarters for the men.

Fifteen rain gauges have been distributed and three more will be shortly, and soon we expect to have 24 stations for observations of rainfall in operation.

The Ancon seismograph, or earthquake-recording instrument, has been repaired, tested, and is now in service.

These three months in this division have been largely utilized in careful and systematic preparation, though much actual work has been accomplished. The installation of stations and the technical training of the men has gone forward until now it is believed that systematic and correct reports and results will be obtained.

CULEBRA DIVISION.

This division, extending from Bas Obispo to Miraflores, covers what is known as the "Culebra cut," as, under whatever plan or type of canal is finally adopted, an enormously heavy land or dry cutting, so called, must be executed. And to successfully carry out this great project necessitates not only the employment of the most effective and modern machinery, but also as nearly perfect an organization as can be devised; and with these conditions met the question of cost per unit will be disposed of.

The material found in this proposed cutting, as shown by actual work performed and by numerous borings and pits, is very much mixed in character, ranging from a red and yellow clay, through several varieties of rock of different degrees of hardness, to a hard trap rock. Altogether the cut is what would be called a rock cut, inasmuch as a very large percentage of it must be loosened by blasting—in fact, about all of it—to enable economical handling.

Since American control of the work, up to August, 1905, the principal efforts seem to have been in the nature of experiments, looking possibly to ascertaining by actual practice the proper methods of handling the material; and to this end modern steam shovels were gradually introduced, until on August 1 there were 11 of these steam shovels at work, served by such equipment as could be picked up on the work as left by the French, in the nature of small Belgian locomotives and dump cars.

These were operated on lines which, by the utmost stretch of the imagination, could not be termed railroad tracks. Thousands of yards of material was loaded and hauled by this equipment, over these tracks, to land dumps, the latter improperly located and in character

unsuited to the end in view. Doubtless the original purpose under which this work was undertaken was a wise one, but the long continuance of it and the utter absence, as far as could be learned, of any thought or attempt to plan a systematic method of handling the work as a whole, would seem to be open to grave criticism.

As soon as possible this situation was thoroughly considered, and as any purpose which this work was designed to serve seemed to have been accomplished, it was immediately determined to close down, as you were then advised, all actual excavation work as far as possible, only continuing, after readjustment, such as seemed to be necessary to conform to some intelligent plan for future operations and to enable an organization to be held together.

Accordingly, 5 shovels and a corresponding amount of train and other service were laid off, and such of the men as it was thought wise to retain were assigned to other duties, occasion, however, being taken to drop from service such as were not considered competent or were otherwise disqualified, and a few of them were returned to the United States.

Then was begun the reconstruction of such old tracks as it seemed would be useful to the work and the construction of new tracks properly built, all looking to as complete a system as possible to handle the transportation of the immense amount of material certain to be moved under any plan of the canal.

All available forces have, therefore, since August 15 been engaged in preparatory work, as indicated above, and no effort has been made to excavate and dispose of any material excepting as rendered necessary to carry out this outlined policy.

At the same time a careful study of conditions, both in the cut and at probably dump of waste grounds, has been made and still continues, and as a result a large amount of transportation and auxiliary equipment has been ordered, and on receipt of same it is expected that track and other conditions will be such that the actual work of excavation can be gradually instituted and increased by proper development until the maximum output of material can be reached.

Observation and record seem to indicate that work can be successfully prosecuted during the dry season—about four or five months each year—and that during the remaining months—seven or eight—the constant rains will unavoidably cause such loss of time, due not only to cessation of work during actual rainfall, but from the effects of it in the cut and on the dumps, that it is seriously doubted whether during more than one-half of such rainy months work can be successfully carried on. In other words, our actual working year will not be one of twelve months, but of about eight or nine months.

The question of plans and methods of carrying out this particular piece of work is very largely dependent on how much is to be done, as, in common with everything in connection with the question of building the canal from ocean to ocean, comes up the handicap of the type of canal that will be built, and until this most important matter is decided no complete and intelligent plans can be adopted, and all work and plans previous to such time will be merely tentative.

Large increases have been made in the force of laborers on this division since July, yet a comparison of pay rolls does not indicate a similar increase. The total June force account was 2,612; the Sep-

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tember force account 3,382. The June pay rolls, on a gold basis, were \$97,213; the September pay rolls, on a gold basis, were \$94,634; and the percentage of force working on tracks to the total number was in June 31 per cent and in September 64 per cent.

The first important work which should be done is the double tracking of certain parts of the Panama Railroad, over which, as far as now can be determined, a vast amount of the waste material from this cut must be transported. Coincident with this work should be the preparation of proper dump grounds, local yards, etc.

The problem of the Culebra cut is one of transportation (including disposal) pure and simple. The material can be loaded with reasonable promptness, but the crux of the proposition is to haul and dispose of it. As can be readily seen, the place and manner of disposition depends entirely on whether a plan of canal is adopted which will require the use of large quantities of material in its construction or whether such a plan is adopted that an unhampered choice in the plans for its disposal can be made. And as the gift of prophecy is withheld from us in these latter days, all we can do now is to make such arrangements as may look proper as far ahead as we can see.

Survey and other technical work has been prosecuted to a large extent. Data needed for consideration of plans for work has been gotten. A topographical map of the greater part of the division was finished. Surveys for the location of various tracks to connect with the main line of the Panama Railroad were made; also for many new contemplated tracks in the canal prism.

A large amount of field survey work to determine the dimension and control of influent streams on both sides of the canal and a large portion of the adjacent country has been contoured. A traverse line has been run entirely around the basins of the Obispo, Massumbi, and Saldanilla rivers and studies made to find a feasible method of diverting and controlling this drainage during the period of construction. Data regarding the discharge of these streams has been compiled, and the whole proposition looking to the handling of water, which is a big problem, is being given attention.

Much miscellaneous work has been done for other departments in furnishing maps, plats, sketches, etc. Office work has been kept well up and all field books indexed. Bench marks have been established and proper records of same made. A large amount of necessary surveys looking to the locating of proper dump grounds along the lower Chagres River have been made and are still under way. Surveys and data for the location of rock crushers, etc., have been made and many others for various purposes.

The general office, or "administration building," so called, in Panama, being so utterly unsatisfactory, both in size, general arrangement, and in its sanitary features, orders were issued for the construction of new offices at Culebra and Empire for the use of the department of construction and engineering, the auditor, and the disbursing officer, together with the proper quarters for the necessary employees.

Plans were prepared accordingly for such offices, and in September the work of construction was begun on them, and it is hoped that by the end of the present current year the clerical forces of these departments will be properly housed in the new location, where work can be

done under much more cheerful and sanitary conditions than at present.

Taking the proposition of the construction of a canal through the Isthmus of Panama as a whole and as a business undertaking, as far as its construction is concerned there does not seem to be any reason why it can not be successfully accomplished. There is no element of mystery involved in it. No problem now apparent (I refer to purely physical problems) but what can be successfully solved—the problem is one of magnitude and not of miracles; although the time required and the consequent cost will be more dependent upon the kind of canal to be built to a far greater extent than has been, I fear, appreciated.

The good results of the work of our very efficient sanitary department have become already so apparent that it is believed the question of health is already assured. The climate is tropical, but my experience leads me to believe it is no more of a handicap than it would be to similar work for a distance of 50 miles from the Gulf of Mexico in any of our Southern States.

The very liberal and wise policy which the Commission is carrying out in its care of its employees and in its treatment of them in every way must, after patient and careful selection, result in a personnel entirely capable of producing good results.

The question of common labor is a very grave one, not in regard to quantity, but quality. We are employing now colored laborers from the West Indian islands, and some Colombians from Cartagena and adjacent country, and it is all very expensive labor even after making the proper allowance in rates of pay. As compared with the best common labor in the United States, I doubt if their efficiency can be rated at more than 33 per cent. Still this efficiency can be raised, and an improvement is already noticeable. A plenitude of laborers, prompt methods of payment, the proper amount of well-cooked food suitable to their needs and desires, and a more careful selection of foremen and superintendents will eventually, it is believed, raise this standard of labor in a most marked degree.

Reference to our white employees has been made. There should be no great difficulty in securing the services of all necessary, with the inducements offered and the nature of the work. It would seem that this work offers many inducements, particularly to young men, that are offered nowhere else in the world. The policy which a very large proportion of our American press has adopted and in many cases is still pursuing, of scattering broadcast any irresponsible, senseless, and wholly untrustworthy rumor in regard to health and other conditions here has, of course, had its effect. But as nine-tenths of the men who come here from the North with an honest purpose to work become, through correspondence, our advertising agents, it is believed the truth will prevail and an ample supply of efficient employees be secured and retained.

In regard to the necessity for additional legislation or changes in rulings of present legislation:

As I have already indicated quite strongly to you, I do not regard the application of the civil-service act as necessary or warranted, and so far believe its workings have hindered rather than helped this work.

The application of the eight-hour law is very unfortunate, and I recommend such legislation as may be necessary to take this project from under its scope.

The final audit of all expenditures in carrying out this work should rest with the Commission, through its auditor, and all methods and rules governing its expenditures should be established by it, and it alone.

A thorough business administration, unhampered by any tendency to technicalities, into which many of our public works sometimes drift, is absolutely necessary; and such an administration honestly and energetically carried out will be the best guaranty of the successful completion of this project. There are obstacles enough to be encountered and overcome which are unavoidable, without creating unnecessary ones.

This department should be allowed for expenditure for the balance of this fiscal year—from October to June, 1906, inclusive—including payments for material and equipment already ordered and that to be ordered, payment for which may be due before the end of the fiscal period, and for pay rolls and other necessary items, \$9,200,000.

THE PANAMA RAILROAD.

The interests of the canal and of the railroad are so closely allied and their physical connection so interwoven that any comment on the one necessarily involves the other. In fact, the Panama Railroad is very largely a creature of the canal, to all intents and purposes, and the construction of the latter in the absence of the railroad would be practically impossible.

This railroad, completed some fifty-five years previous, had, by reason of its peculiar location, subject to no competition, and consequently free to do as it pleased, been allowed to lie still, apparently, for years, making no progress or improvements toward modern advancement. The world had moved and it had not, neither in personnel, equipment, methods, nor otherwise.

Business had very largely increased, but neither facilities nor methods had kept pace, and as near a state of paralysis existed as it is possible to conceive. Part of this condition arose from lack of equipment, terminal and line facilities, and much from a lack of organization and a proper comprehension on the part of the management as to the real situation. The larger part of its limited freight equipment was tied up under load—some of it had been for months. No adequate system of car accounting or tracing was in effect, and while passenger-train movement was fairly good, freight handling had about come to a stop. About the only claim for good work heard made was that there had been no collisions for some time. A collision has its good points as well as its bad ones—it indicates there is something moving on the railroad.

The completion of the setting up and getting into service of the first 200 of the 500 lot of flat cars which had been purchased by the Commission was hastened, but the very heavy handicap of the necessary use of the few and antiquated locomotives and cars remained, and it does still. Changes in personnel of officials were made, and a start at modern methods of car handling was inaugurated, and marked improvement in handling business is already apparent.

The condition of the property, aside from the track, was and is bad, apparently no attempt having been made for a number of years even to keep up ordinary repairs on terminals or floating equipment, with the natural consequence that the piers and docks, as well as boats, were hardly serviceable. The repairs on them are now under way, also strengthening road bridges to enable them to carry safely the new locomotives and other rolling stock, orders for which were placed by the Commission early in the year. Work is in progress of rebuilding entirely the telegraph and telephone lines, which were practically out of service. Carpenter and roadway gangs were and still are being organized, and an attempt is being made to get things in general on a business footing.

Construction had been begun early in the year of two timber docks at Cristobal and one at La Boca, and pursued in a more or less desultory way until August. Since that time the work has been pushed, until now, while they are not entirely completed, they are nearly so, enough so that they have been placed in service and will greatly relieve the situation. The construction of other facilities is contemplated. A new switching yard is necessary, and modern facilities at Cristobal, together with the new shop at the same point, will enable the present antiquated and altogether inadequate facilities at Colon to be abandoned.

Some improvements in the nature of yards and accessories must be made at La Boca and Panama, and these, with the double tracking and line improvements in the nature of side tracks and coal and water plants, will in time enable the business of the road to be continued with some degree of satisfaction.

Contract has been made for the installation of a small modern coal-ing plant, and also for large traveling crane for handling heavy and bulky material from ship to car or storage yard at Cristobal. The introduction of these two machines alone should enable the company to dispense with the services of a large number of laborers and reduce the cost of handling material in a very marked degree.

The relaying of new steel rail continues, though slowly. About 10 miles of track yet remain to be relaid with 70-pound rail per yard in place of the present old 56-pound rail per yard.

During this time, when some relief seemed to be in sight as the result of changed methods, some of the most important western Central American ports, without a moment's warning, placed an embargo or quarantine against our south terminal, La Boca, at a time when we had thousands of tons of freight destined for these points at Colon, in transit, and in cars and on our docks at La Boca. This complicated matters to a point hardly conceivable to a person not on the ground, and this state of affairs continued for some weeks, cargoes in the meantime constantly arriving at Colon. But at this date the quarantine has been raised and conditions are somewhat better, although it will be at least thirty days yet, owing to absence of ships at La Boca, before we can reach normal conditions.

The nature of the traffic has complicated the handling of the business of the railroad to such an extent that an extremely low cost of handling can never be arrived at. All of the canal business moves from terminals to interior points, resulting in a very light average through train tonnage and a very large empty-car haul, and these factors, coupled with a heavy-grade road and extremely light power,

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resulting in small trainloads and large train mileage, will keep operating expenses high as compared with those of roads operating under more favorable conditions in regard to above as well as with cheaper labor.

Still correct methods, better supervision, and modern rolling stock will improve matters very much, although time will be necessary to show a very marked improvement.

The railroad has for some time past been operating a commissary, or supply store, at Colon, furnishing a high-grade line of food and other necessary supplies to its employees. To enable its benefits to extend over the employees of the Commission branches have been established at several points along the line of the canal, open to all employees of the Commission under restrictions and arrangement by the use of properly guarded coupons.

Hotels and eating houses have been established at different points under similar restrictions and guard, open only to employees, and the result has already been so very beneficial and the satisfaction among our employees so great that this move is justly regarded as a very long step toward the solution of the problem of providing proper food at reasonable prices to all classes. Thus one of the most serious problems met in the past, and the one trouble which has undoubtedly caused more dissatisfaction, and justly so, is being met and it is believed will be successfully solved.

Following is a statement of expenditures for the period the quarter ended September 30, 1905, covering the items of construction and engineering, general service accounts, and Panama waterworks, this statement, however, not giving the cost of material and supplies:

Account.	July 1 to Sept. 30, 1905.
Office chief engineer	\$27,234.48
Manager labor and quarters and corrals	49,008.19
Bureau waterworks, sewers, and roads	951.10
Bureau meteorology and river hydraulics	3,072.67
Canal construction	315,812.20
Machine-shop expenses	215,548.55
Zone highway improvements	18,022.81
Street improvements, Panama	5,290.66
Construction of waterworks and sewers	135,673.61
Construction and repair of buildings	285,343.51
Total	1,050,613.89

All of which is respectfully submitted.

Truly, yours,

JNO. F. STEVENS,
Chief Engineer.

HON. THEODORE P. SHONTS,
*Chairman Isthmian Canal Commission,
Washington, D. C.*

EXHIBIT C.

RESUMÉ BY CHIEF ENGINEER STEVENS OF CONDI-
TIONS ON ISTHMUS ON JULY 1, 1905.

ISTHMIAN CANAL COMMISSION,
DEPARTMENT OF CONSTRUCTION AND ENGINEERING,
Ancon, Canal Zone, Isthmus of Panama, June 30, 1905.

HON. THEODORE P. SHONTS,
*Chairman Isthmian Canal Commission,
Washington, D. C.*

SIR: In compliance with your instructions, I beg to hand you the following statement, same being not a report, but only in the nature of a résumé of the conditions and a general outline of the duties of and the work performed by the different divisions and bureaus during the period from February 1 to June 30, 1905.

You understand, of course, that I am not prepared to make or vouch for a formal report on the period embraced above, as this department was during that time under a very much different organization and under another person as chief engineer, and that I can only give what views I have extracted from reports and records; and while this statement may not be as full as may be desired, it will, I think, give you the information you intended it should.

From June, 1904, to March, 1905, the work in connection with the investigations and surveys relating to the construction of the canal was carried on as outlined by the Commission in 1904. The different assistant engineers appointed prior to July, 1904, reported direct to the chief engineer; but after the investigations intrusted to them neared completion and the work expanded, divisions were organized and different residencies were placed under the charge of the division engineer.

On June 30, 1905, the engineering department relating directly to the construction of the canal comprised five divisions and eight so-called bureaus, and the following is a brief outline of the duties and work performed by the different divisions and bureaus during the period from February 1 to June 30, 1905.

Previous to the organization of the department of engineering and construction as effective, June 1, 1905, special investigations were made and reported on, relating to the Tiger Hill cut-off of the proposed canal between Gatun and Bohio; investigations for foundations for dam sites at Gatun, Buena Vista, and San Pablo; borings on the center line of the canal between Colon and Miraflores. Detailed and complete reports relating to these have been submitted and filed for future reference.

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COLON CONSTRUCTION DIVISION.

Topographical surveys have been made from Limon Bay to Bohio. Diversion channels have been located and cross sectioned. The shore line from the head of Limon Bay to Manzanillo Bay has been surveyed, these surveys covering piers, buildings, and tracks in Cristobal and Colon. Minor surveys for special reports were made as required. Extensive subsurface investigations have also been carried on to determine the character of the material to be encountered in construction. These borings extended to a depth of from 40 to 50 feet below sea level. Profiles and maps showing the results of borings and surveys have been made up, and quantities for approximate estimates have been computed. Old railroad tracks have been restored and extended, and a plan for a complete yard has been under consideration.

The construction of a new wharf at Cristobal has been commenced and progress continued during the period, but owing to lack of material and other causes it still remains uncompleted at the end of the period.

One of the old French dredges, repaired by the mechanical department, was put into operation on May 24. This dredge has a capacity of from 200 to 250 cubic yards per hour, and can work to a depth of about 29 feet; it is being used to deepen the channel in the inner harbor leading to the new wharf. The material excavated by it is being towed to sea in barges which have been repaired in the shops at Cristobal.

CHAGRES DIVISION.

This division was instituted on June 1. A party with headquarters at Tabernilla was organized during the latter part of June, and at present their work consists principally in verifying the accuracy of existing maps and acquiring information relating to the control of the Chagres River between Bas Obispo and Bohio, and the extent and character of existing diversion channels.

GAMBOA DIVISION.

This division includes the site of the Gamboa dam and all investigations relating to the Chagres and its tributaries above the same. A study is also being made of the regulation of the Chagres in connection with the artificial lake formed by the Gamboa dam. Reports relating to these investigations have been submitted from time to time.

CULEBRA DIVISION.

During the period covered by this report the principal energies relating to the construction of the canal were directed at Culebra, and accurate and detailed accounts were kept of all classes of work in that connection, in order, apparently, to arrive at an ultimate unit price for future cost of the work as well as, probably, to ascertain the proper method which should be adopted later on in the real work of construction, as well as the kind of plant which would be required.

The result of these observations for a period of twelve months is presented on sheet A, hereto appended, and probably needs no expla-

nation with the exception of "Arbitrary charges." An arbitrary charge of 6 cents per cubic yard to cover the cost of investment in plant was made and distributed among the different items related to plant, as shown on sheet B. This arbitrary charge greatly exceeded 6 cents per cubic yard during the period covered by this report, but it was believed that with a better organization the cost of investment in plant would be covered by the arbitrary charge adopted.

The first steam shovel was installed November 11, and the last French excavator was discarded June 16, 1905. On June 30 nine steam shovels were in operation, and the total number of steam shovels at work, by months, from February to June, is shown on sheet C, and the daily average output per steam shovel is shown on sheet D.

LA BOCA DIVISION.

This division was placed under the direction of a division engineer June 1. The work under way during the period consisted of surveys, operation of ships' ways, repairs to floating plant, and the operation of a dredge in the channel entrance. But owing to the great scarcity of material and help very little work was done up to June 1. Quarantine regulations, due to a case of bubonic plague, were a source of additional delay during the latter part of June. But during this month borings were commenced and some progress made on topographical work.

The floating equipment, previously under the direction of the material department, was placed under the charge of the division engineer; a thorough inspection of this equipment made and its value and usefulness considered. And in connection with this floating equipment a small machine shop, marine ways, and a gridiron were placed under the charge of the division engineer.

The marine ways were only available for small boats, not over 150 feet in length. The gridiron has a length of approximately 150 feet, with a width of 30 feet, and is also of service only in handling small boats.

The wharves at La Boca, with the exception of the pile and timber wharf, which is under construction, are operated and maintained by the Panama Railroad Company.

BUREAU OF PERSONNEL, TRANSPORTATION, AND QUARTERS.

All matters pertaining to selection and assignment to quarters, supervision of pay rolls, applications for positions, transportation, requisitions for materials, and records relative to the personnel of the different divisions and bureaus connected with the department of engineering and construction were handled by the general quartermaster as chief of the above bureau.

Daily reports of the actual number of men at work were kept, and records showing the gradual expansion of the force were kept and illustrated graphically. On June 30 the force connected with the different departments of the engineering and construction department, according to records, consisted of 1,600 gold employees and 6,712 silver employees.

BUREAU OF SUPPLIES.

The bureau of supplies, in effect June 1, was organized May 8, 1905, at a meeting of the executive committee. This order went into

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effect June 1, and this bureau was incorporated in the department of construction and engineering at that date. Previous to that time it was known as the material and supplies department, being a separate division of the canal organization.

The chief of this bureau was charged with the receipt, inspection on the Isthmus, care, shipment, transfer, issue, and disposition of all supplies, material, equipage, and floating equipment unissued and not in use. Requisitions for properties of whatever nature, after being duly approved by the heads of the different departments, or persons in authority, were submitted to the chief of this bureau or his authorized agent. Whenever material on the Isthmus acquired from the old canal company could be used economically, material of recent purchase was not issued, or the purchase of such material was not made, it being the policy to utilize as much of the supplies acquired from the old canal company as was consistent with proper economy.

On account of the inadequate supply and inefficiency of the labor available, great difficulty was experienced in meeting the needs and requirements of this department.

On June 15, under the bureau of supplies, a division of survey and appraisal was established, for the purpose of making an inventory of and putting a price on stock received from the French. This order was to take effect July 1, but nothing tangible or of practical value has ever come out of it, owing to the utter impossibility of carrying out this programme intelligently.

BUREAU OF WATERWORKS, SEWERS, AND ROADS.

During the period covered by this report work on the waterworks and sewers was vigorously pursued, but much delay was caused by the scarcity of labor and inability to get material promptly. This applies especially to the irregular delivery of sewer and water pipe for Panama and points along the line and the unsatisfactory labor conditions in connection with the work.

The water supply for Panama was derived from a reservoir formed by raising an old dam which had been constructed by the former Panama Canal Company, impounding the waters of the Rio Grande River at a point about 10 miles from the city of Panama. The original dam has been greatly strengthened and raised 20 feet. The basin of the reservoir was thoroughly cleaned and all vegetation removed for some distance above the high-water line.

In connection with the Rio Grande reservoir an auxiliary reservoir at Ancon, with a capacity of 1,000,000 gallons, was put in course of construction. The main leading from the Rio Grande reservoir to the Ancon reservoir consists principally of 16-inch cast-iron pipe, but approximately 4,000 feet of 20-inch galvanized pipe was used at the upper end, which subsequently was surrounded by concrete to protect it from being crushed.

The dam at Rio Grande and the main leading to Panama were practically completed July 1, and approximately 30 per cent of the distribution pipe of the city of Panama was in place at that date. This distribution is made from the auxiliary reservoir at Ancon, through mains reducing from 20 to 6 inches.

It was found that the rainfall from the watershed of the basin is considerably larger than was figured on in the original report

recommending Rio Grande as the source of supply, and a bacteriological analysis made of samples of water taken from different parts of the reservoir show only a slight contamination at the upper portion of the lake. The quality of the water near the dam, or outlet to the supply line, was found to be excellent.

Work on the sewers was also under way, and generally the combined system has been adopted. In districts where the population is not congested it is not considered necessary to provide for storm water, and a separate system was installed, storm waters in these districts being carried to the sea in the gutters of the streets. Progress in this work has also been greatly delayed, due to inefficient labor and unsatisfactory delivery of material, necessitating in some instances the construction of concrete sewers.

Owing to similar conditions, progress in connection with the permanent Colon water supply has been very unsatisfactory, and it was doubtful up to the end of the period whether during the coming dry season it will be possible to furnish the city of Colon with water from the new source. At present the supply is partly furnished by the old pumping plant, which has been restored and somewhat extended.

A small storage system for a portion of Cristobal was authorized, constructed, and placed in service.

At different points along the route of the canal the old French system of supplying water for domestic and construction purposes has been restored and extended, and at Culebra and Gorgona considerable new work has been authorized and partly executed. A plan for sewers at Culebra was also outlined and work gotten under way, and near Empire a dam across the valley of the Comacho was placed under construction.

At Gorgona a plan was outlined and proposed for the consolidation of the original two French systems, with four pumping stations, into one system, which, when completed, will also provide sufficient water for the Bas Matachin shops.

At Bas Obispo the old French system has been restored, and up to the present it has served to supply sufficient water for domestic and sanitary purposes. This system has been somewhat extended in order to supply the marine camp at Haut Obispo.

Corozal, Miraflores, and Paraiso will be supplied with water from the Rio Grande reservoir. Distribution pipe has been laid at these points and connection made with the main leading to Panama, and it is thought that not later than July water can be delivered at these points.

Since March, 1905, the construction of roads and highways has been placed under the bureau of waterworks and sewers, and the principal work done in that connection was the reconstruction of the Caledonia Bridge, which was completed during March.

A concrete arch on the Savanas road has also been constructed, and the construction of a macadamized road to La Boca approximately 2 miles in length was completed during the period covered by this report.

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BUREAU OF MACHINERY AND EQUIPMENT.

On June 30 the organization of the bureau of machinery and equipment (so designated since June 1, 1905) consisted of 1,216 men, divided as follows:

Office of superintendent of motive power and machinery-----	23
Bas Matachin shops-----	537
Cristobal shops-----	313
Empire shops-----	343
Total-----	1,216

Two hundred and ninety-six of these were artisans, foremen, clerks, etc., and the balance were Jamaican and native laborers, or Americans on silver rolls. It was thought that this organization would be able to meet all requirements under existing conditions, but after extension of the shops and installation of additional and modern machinery requisitioned for an increase of the force would probably be necessary to meet the more extensive operations of the future.

An estimate was made and preparations placed under way to complete an organization necessary to meet all requirements for the maintenance of 100 steam shovels, with the locomotives and cars required for operating same.

The principal shops are now located at Bas Matachin. This plant includes machine shops, with locomotive pits, boiler shop, blacksmith shop, car shop, planing mill, carpenter and pattern shop, foundry, and building for office and storehouse. And the present capacity of the shops permits facilities for overhauling 5 locomotives and 150 small dump cars monthly.

The foundry has a nominal capacity of 50 tons of cast iron or like miscellaneous work and 3,000 pounds of brass castings per month. An addition to the above shops and foundry is now under way, which will increase the capacity to several times the present output.

At present the shops second in size and importance are located at Empire. Considerable repair work was required to restore them to usefulness; many missing parts of machinery had to be replaced and all machinery overhauled. With some additions of modern machinery this shop is now in position to turn out considerable work; and during the past year approximately 100 locomotives and 732 cars have undergone either general or special repairs, and 15 cars were built, with a capacity of 40 passengers, to be used in the transportation of laborers.

Numerous old boilers have also been overhauled and placed in commission, and cranes and other machinery restored to usefulness. Much of the machinery brought to the Isthmus by the previous companies was, after more or less thorough overhauling, resurrected and placed in service as fast as the demand for same became apparent.

The shop at Cristobal is also under the jurisdiction of this Bureau, but work at this point was principally devoted to repairs in connection with floating plant and the overhauling of pumps, boilers, and other machinery required in the work of the waterworks and sewers department.

Improvements and extensions to this plant have been authorized and are now in progress, and when completed will provide facilities

for the maintenance of Panama Railroad motive power and rolling stock. In addition to doing the mechanical repair work for the floating plant on the Caribbean side of the Isthmus, it may also be able to give assistance to the Bas Matachin and Empire shops in overhauling rolling stock used on the canal work.

BUREAU OF ARCHITECTURE AND BUILDING.

All work relating to the construction of new buildings, repairs and alterations to existing buildings, and the location, construction, and repair of highways was under the immediate supervision of the supervising architect. And this work, frequently under trying conditions, was ably and intelligently executed under his direction until April 30, when the bureau, through his death, sustained a severe loss.

Owing to labor problems, lack of building material, and transportation facilities, the work of the bureau has been seriously handicapped. On July 1 building material of all kinds was practically exhausted. Hardware, such as nails, hinges, etc., could be obtained from the French stock, and, although of old type, were utilized to advantage.

The organization of this bureau was greatly expanded and enlarged, and efforts made to place it on a satisfactory basis. Elaborate plans for new buildings were made and grouped under several headings. But owing to lack of building material the construction of new and repairs to old buildings did not progress as satisfactorily as desired.

During this period, however, approximately 300 houses were repaired and 40 new buildings were under construction and completed. The principal new structures were the bachelors' quarters at Culebra and Corozal, which will provide room for several hundred employees.

Labor quarters at Bas Matachin, hospital buildings at Ancon, and some dwelling houses at Ancon and Corozal have been repaired. Extensive repairs were also made at different points on the line of the canal, and every effort made to supply suitable quarters not only for American employees, but for laborers as well.

The wharf at La Boca was also placed under construction under the supervision of this bureau, but is as yet not completed.

BUREAU OF METEOROLOGY AND RIVER HYDRAULICS.

All available data relating to the Chagres River and its tributaries and all records pertaining to precipitation and meteorology are now being assembled and arranged in such manner that they may be easily examined and consulted. To this end the bureau of meteorology and river hydraulics was instituted, and all gauging and hydrographic stations have been placed under this bureau.

Previous to that time the French system of discharge measurements and rainfall observations had been continued, with some modifications. The principal observation stations during this period were located at Bohio, Gamboa, and Alhajuela.

Rainfall observations were also made at Gatun, Culebra, Cristobal, and other points along the canal route by the different engineers sta-

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tioned at those places. The results of all these observations and the data collected by them are now in the possession of the bureau of meteorology and river hydraulics, and all useful and reliable data relating to hydraulics of the Chagres are being compiled by this bureau.

BUREAU OF MAP MAKING, LITHOGRAPHY, AND PRINTING.

The records and maps acquired from the Panama Canal Company are in the custody of the chief of this bureau, and information, technical or otherwise, pertaining to the affairs of the Panama Canal Company, descriptions of property acquired from the former organization, records of buildings and lands, are kept on file at this office.

Lithographic maps of the city of Panama and maps of the canal line, showing topographical and property lines, were also made by this bureau.

Blank forms and reports of various kinds were printed and bound by this bureau. The average monthly production has now increased to 220,000 copies of various description.

BUREAU OF COMMUNICATION.

All work relating to telephones and telegraphs is referred to this bureau, which includes the installation and repair of telephones and telegraphs for the Panama Railroad Company as well as the Canal Commission.

Several telephones were installed at different points on the canal route, also in Panama and Colon, but much remains to be done before it will be possible to carry on the work with facility and promptness required for work of this magnitude.

All of which is very respectfully submitted.

Respectfully, yours,

JNO. F. STEVENS,
Chief Engineer.

SHEET A.—Statement of net approximate cost of work for year July 1, 1904, to June 30, 1905.

[Culebra division. Total output for year, 741,644 cubic yards.]

Character of work.	Total cost (United States gold).	Cost per cubic yard (United States gold).
Plant (covered by arbitraries).....	\$36,536.30	\$0.0492
Mining.....	70,045.24	.0945
Loading.....	77,271.82	.1042
Transportation.....	120,006.04	.1618
Dumps.....	40,592.49	.0547
Maintenance of tracks.....	52,093.55	.0709
General expense.....	38,428.00	.0518
Total.....	434,974.04	.5865

SHEET B.—Arbitrary charges to cover cost of investment in plant for year, July 1, 1904, to June 30, 1905.

(Culebra division.)

Charge.	Amount per cubic yard, United States gold.	Remarks.
A. Steam shovels.....	\$0.0100	Includes cost of new shovels set up ready for service.
B. Cars.....	.0125	Includes cost of new cars.
C. General rebuilding of engines..	.0050	Includes general rebuilding, but not running repairs.
D. Rebuilding dump cars.....	.0050	Do.
E. Track construction.....	.0100	Includes building new tracks and restoring old tracks to be used for transportation purposes, but does not include the laying and shifting of tracks around steam shovels and on dumps.
F. Quarters.....	.0025	Includes building of new quarters and repairs to old.
G. New appliances.....	.0050	Includes new appliances, such as unloading plows, bank spreaders, Lidgerwood unloaders, etc.
H. New engines.....	.0100	Includes cost of new engines.
Total.....	.0600	

From July 1 to November 30, 1904, there was no arbitrary charge to cover cost of investment in plant.

SHEET C.—Statement showing steam shovels at work, by months, from February 1 to July 1, 1905.

Months.	Machines at work at beginning of month.			Installations.			Date.	French excavators discarded.		Daily average number of machines at work.
	Excavators.	Steam shovels, 70-ton.	Steam shovels, 95-ton.	Steam shovels, 70-ton.	Steam shovels, 95-ton.	Excavators.		Number.	Date.	
February.....	50	101	201	102			21			47
March.....	50	101	201	103			15			64
April.....	50	102	202	104			25			84
	52	101	201			18	8			
		102	202	105			10			
May.....	50	103								
	52	104								
	18	101 to 105, inclusive.	201	106			17	18	31	8
June.....	50	101 to 106, inclusive.	201		203		21	50	16	84
July.....	52	101 to 106, inclusive.	202					52	15	
			203							

NOTE.—18, 50, and 52 are French excavators. Steam shovels 101 to 106, dipper capacity 2½ cubic yards; steam shovels 201 to 203, dipper capacity 5 cubic yards.

SHEET D.—Relative efficiency of steam shovels as shown by amount of material excavated from February 1 to July 1, 1905.

Steam shovel.	Hard rock.	Soft rock.	Earth.	Total.	Excavator days.	Daily average yardage.
101.....	8,155	10,055	57,500	75,710	118	641
102.....	105	11,705	56,200	68,010	102	667
103.....		22,620	42,800	65,420	95	688
104.....	10,565	1,650	8,420	20,635	78	264
105.....	4,380	3,680	14,720	22,730	66	344
106.....			9,565	9,565	29	329
201.....	43,560	28,360	5,635	77,555	118	657
202.....	935	22,870	22,325	46,130	98	470
203.....			430	430	10	43
Total.....	67,700	100,890	217,595	386,185	714	641

EXHIBIT D.

**REPORTS BY GENERAL HAINS AND MAJOR HARROD,
AND BY COLONEL ERNST ON CONDITIONS ON THE
ISTHMUS JULY 1, 1905.**

PANAMA, July 17, 1905.

Mr. T. F. SHONTS,
Chairman Isthmian Canal Commission,
Washington, D. C.

DEAR SIR: Pursuant to the request in your letter of July 5, 1905, that we give our "attention to the important matter of studying the present condition of the work on the Isthmus carefully while here, with the end in view of making a report as to the things actually accomplished under former Chief Engineer Wallace's supervision from the time the work started by the Government until the time of the taking over of his department by Chief Engineer Stevens," we have examined the records of the chief engineer's office and have gone over the different works on the line; we have also consulted the engineers in direct charge of work.

We find in the chief engineer's office a series of reports for the fiscal year ending June 30, 1905, which corresponds substantially with the date of the transfer of duties from Mr. Wallace to Mr. Stevens. These reports are by the acting chief engineer and the heads of the several departments under him, and give a concise statement of the work accomplished during the past year and its condition at this date. These reports are accompanied by many blueprints.

We have taken a set of these reports to Washington, to use in the preparation of the presentation to the advisory board of engineers, leaving the originals and copies on file in the chief engineer's office.

The list of them is as follows:

General reports of work done on Culebra division.

- Annual report, July 1, 1904, to June 30, 1905.
- Report for period July 1 to December 31, 1904.
- Report for period January 1 to March 31, 1905.
- Report for period April 1 to June 30, 1905.
- Monthly reports, January, 1905 to June, 1905, inclusive.
- Annual report of Resident Engineer H. F. Dose, covering investigations at Bohio, June 1, 1904, to February 28, 1905, with detail blueprints.
- Report of work for Bas Obispo (Alhajuela division), by Resident Engineer Boyd Ehle, July 1, 1904, to December 31, 1904, with detail blueprints.
- Report for Bas Obispo (Alhajuela division) and bureau of Chagres River surveys, year ending June 30, 1905, by Mr. C. L. Carpenter, assistant engineer, with detail blueprints.
- Supplementary report of Assistant Engineer C. L. Carpenter, relating to conditions concerning the Gatuncillo tunnel and possibilities for open spillway to Gamboa Lake, with detail blueprints.

Report covering results of borings made between Gatun and Bohio, in connection with the Tiger Hill cut-off and Gatun dam site, by Mr. A. B. Nichols, assistant engineer, with detail blueprints.

Profile of center line of canal, showing approximate geological classification of materials from Bohio to Pedro Miguel, by Mr. H. F. Dose, acting division engineer.

Annual report (Colon construction division) for the year ending June 30, 1905, by Mr. F. B. Maltby, division engineer; also transmitting profile of borings inner harbor at Colon and along center line of canal to Gatun.

Annual report of La Brea construction division year ending June 30, 1905, by Mr. F. B. Maltby, division engineer.

Annual report bureau of water works, sewers, and roads for the year ending June 30, 1905, by Mr. C. E. Davis, chief of bureau.

Annual report bureau of architecture and building for the year ending June 30, 1905, by Mr. A. M. Burt, chief of bureau, submitting blueprints of all buildings erected and designs for future erection.

Annual report bureau of machinery and equipment for the year ending June 30, 1905, by C. A. Strom, superintendent of motive power and machinery.

Annual report bureau of supplies for the year ending June 30, 1905, by Mr. E. C. Tobey, chief of bureau.

Annual report bureau of maps, lithography, and printing, for the year ending June 30, 1905, by Mr. C. Bertocini, chief of bureau.

Annual report bureau of meteorology and river hydraulics for the year ending June 30, 1905, by Mr. Ricardo M. Arango, chief of bureau, submitting blueprints showing graphically the precipitation, river discharges, and other information of similar character as far back as information can be obtained, and brought up to date.

Annual report bureau of personnel, transportation, and quarters for year ending June 30, 1905, by Capt. Edw. L. King, general quartermaster, chief of bureau.

Concerning the reports on surveys and examinations it may be said that much valuable information has been collected.

The following abstract is made of the reports relating to actual construction work:

WORK ON CULEBRA DIVISION.

Up to date 10 shovels have been installed and are now in operation, as follows:

1904.—November 11, steam shovel No. 101; December 22, steam shovel No. 201.

1905.—January 19, steam shovel No. 202 (work begun February 15); February 21, steam shovel No. 102; March 7, steam shovel No. 103; March 25, steam shovel No. 104; April 10, steam shovel No. 105; May 17, steam shovel No. 106; June 29, steam shovel No. 203; July 3, steam shovel No. 204.

NOTE.—The series beginning with 101 are 70-ton shovels and the series beginning with 201 are 95-ton shovels.

Nineteen more steam shovels are ordered.

The total output for the year ending June 30, 1905, has been 741,664 cubic yards. The monthly range of output has been from 19,695 cubic yards in October, 1904, to 132,810 cubic yards in March, 1905.

The price as given by the chief engineer has ranged from 43.8 cents in March, 1905, to 102.7 cents in June, 1905.

The scope of operations at present is to open the cut excavated at both ends for drainage and to remove material from the sides, which threatens to slide into the prism of the cut.

Track building has been actively carried on.

COLON CONSTRUCTION DIVISION.

One of the French dredges has been repaired and put at work in the harbor of Cristobal. It is removing 2,000 to 3,000 yards per day,

REPORT OF THE ISTHMIAN CANAL COMMISSION.

135

at a cost of operation, as given by the engineers, of 6.6 cents per yard. A depth of 20 feet plus is available into the harbor and up to the docks. There is dock room for two ships, and extension for another is near completion. The depth of La Boca Harbor and entrance has been maintained by the use of another French dredge.

Wharf, track, and warehouse facilities are being established at Cristobal.

BUREAU OF WATERWORKS, SEWERS, AND ROADS.

Waterworks.—The Rio Grande reservoir and supply line for Panama is completed and water turned on. Corozal and Paraiso derive a supply from this line. Extensions and connections are being made in the city of Panama, and the Ancon reservoir is under construction.

Old French systems are being repaired and extended or new systems installed at Culebra, Haute and Bas Obispo, and Gorgona. The system in operation at Culebra is temporary. Work has been commenced on the Colon reservoir.

Sewers.—A sewerage system is well advanced in Panama and commenced in Culebra and Cristobal.

Roads.—The roads have been repaired and two stone crushers installed and operated.

BUREAU OF ARCHITECTURE AND BUILDINGS.

Plans have been prepared for the construction of 76 different kinds of structure; 357 out of 2,145 of the buildings received from the French have been repaired, and 48 new buildings of various kinds and sizes erected, including hotels at Corozal and Culebra.

BUREAU OF MACHINERY AND EQUIPMENT.

Machine shops have been repaired, extended, and equipped at Bas Matachin, Empire, Culebra, and Cristobal, which are now in operation. These shops have done a large amount of work, both of repair and construction.

There are at present in repair and at work on construction 10 new steam shovels, 58 old French locomotives, and 727 old French dump cars. All new rolling stock is as yet in transportation service.

Details on all these subjects will be found in the reports hereinbefore referred to.

We submit herewith a letter from Mr. W. E. Dauchy, acting chief engineer, in response to certain inquiries made by us, and which contains information concerning the progress and present condition of construction work and other kindred subjects.

We have the honor to remain, very respectfully, yours,

PETER C. HAINS,
B. M. HARROD,

Members Isthmian Canal Commission.

[Inclosure.]

PANAMA, July 14, 1905.

Gen. PETER C. HAINS and Maj. B. M. HARRON,
Members Isthmian Canal Commission.

SIR: I am in receipt of your letter of July 14, in which you ask me to give you a brief statement "of the present condition of the work" and of the "things actually accomplished under former Chief Engineer Wallace's supervision from the time the work started by the Government up to and including June 30, 1905."

Replying to the two questions asked, I will reverse their order and answer the second one first—that is, in regard to the things actually accomplished, etc.

When the Government of the United States took over the work from the French company the only portion of the work being carried on was a little work in the main part of Culebra cut. All of the balance of the work had been abandoned by the first French company some fifteen years previously, and the whole right of way, including shop locations, tracks, and towns constructed for canal employees, was entirely overgrown with a dense growth of jungle. A great deal of this growth has been cleared away, this work alone requiring a large amount of labor. At Cristobal, Bas Matachin, Empire, and Culebra sites formerly occupied by the French company for construction and repair shops have been cleared of jungle and the shops restored and put into operation, the old French machinery overhauled and supplemented by new, modern machinery. The shops at Bas Matachin and Empire are in process of enlargement, considerable having been accomplished in that direction.

Plans have also been made for the enlargement of the shops at Cristobal and for the construction of additional shops in the vicinity of Pedro Miguel. Fifty-eight engines have been taken from where they were left by the first French company in the jungle and in these several shops, have been thoroughly overhauled and put in serviceable condition. Also 980 French dump cars have been so repaired. In order to get at these cars and engines where they were left by the French people a considerable amount of railroad track has had to be repaired and relaid. The jungle growth has been cleared away from villages formerly occupied by French employees, and a great many French buildings have been repaired and put in a habitable condition. Three hundred and fifty-seven buildings have been completely overhauled and repaired, a large number are now in process of being repaired, and 48 buildings have been constructed new. This work of rebuilding old structures and erecting new ones has been very much delayed on account of lack of material, which was asked for several months ago and which is now being received.

A large amount of technical work has been done, including the locating of the center line of the canal as established by the French and the running of several lines to determine whether this alignment could be improved upon, one of these trial lines being the line extending from Limon Bay to the curve at Gatun, another being a trial line from the vicinity of Bas Obispo to Pedro Miguel, and also several minor lines between these two points. A large amount of cross-section work has been done and estimates made for various plans of canal at different elevations from the sea level to the 90-foot level. A large number of borings have been made to determine the character of the material to be excavated within the canal prism. Careful examinations, both above and below ground, have been made at three of the proposed sites for dams in the vicinity of Bohio, these examinations including very careful borings taken to determine the elevation of bed rock at numerous points along the proposed sites. A careful examination both above and below ground was made of the proposed location for a dam at Gatun. This examination also included careful borings to determine the elevation of the surface of bed rock. The same examinations were made at the proposed location of a dam at Gamboa, and contour lines have been run out to determine the area of the proposed Gamboa reservoir.

Surveys have been made for tunnel lines connecting this reservoir with both the drainage upon the Atlantic and Pacific slopes, and a survey is now being made of a proposed location for an open-cut spillway into the Atlantic drainage as an alternative of the tunnel proposition. A few borings have been taken along the proposed route of the tunnel to the Atlantic drainage. Surveys have been made of all the country adjacent to the canal in the vicinity of Colon, Bas Obispo, Bohio, Culebra, and to a greater or less extent along the whole length of the canal. Surveys and estimates have been made for the diversion channel of the Gatuncillo River. Estimates have been made for the proposed breakwater across the outer limits of Limon Bay at Colon, and estimates have

also been made for the amount of dredging to be done to complete the inner harbor at Colon. One of the large dredges left by the French company at Cristobal has been repaired and put in operation, together with a tug and several self-propelling barges.

At La Boca a 300-ton lighter, two 55-foot steam launches, and a 300-yard self-propelling barge have been rebuilt. The dredge that has been operated for several years by the Panama Railroad at La Boca has been taken over and is now in operation.

Waterworks have been constructed for the city of Panama and are now in use over a portion of the city. The sewer system for the city of Panama is in process of construction, a portion of it being completed. The construction of waterworks for the city of Colon has been started, but little has been done. Waterworks for the town of Culebra have been completed, and also a sewer system put in. Minor systems of waterworks are being constructed at Empire and Gorgona. Plans and estimates have been made for paving the streets of Panama and material has been ordered for this work.

At Culebra a large amount of preparatory work has been done. When the work was taken over from the French there were about 20 miles of railroad track in existence, most of it in very poor condition. Considerable work has been done upon this track, and 15 miles of additional track have been either laid anew or cut out of the jungle as left by the French and rebuilt. A number of the old French excavators were fixed up and worked long enough to determine their efficiency. Ten new steam shovels purchased in the United States have been set up, and on the 30th of June, 1905, 19 of them were working and the other was ready to work. Seven hundred and forty-one thousand six hundred and forty-four cubic yards of material have been removed from Culebra cut.

This material included hard rock, soft rock, and earth. With the installing of the French excavators and new steam shovels at Culebra careful records were kept of their comparative efficiency. As the new steam shovels have been installed they have been put to work with a view to testing their efficiency in all classes of material to be handled in Culebra cut, and careful records have been kept of all the items entering into the cost of removal of the different classes of material.

A great deal of work done at Culebra has been of a preparatory nature, such as shaping up the cut with reference to drainage and future economical working. A great deal of time and study has been devoted to the necessities of the work in the way of plant, and quite extensive orders have been placed for steam shovels, cars, locomotives, Lidgerwood unloaders, bank spreaders, pneumatic drills, etc.

Finally the organization has been perfected on a working basis, and a good, competent force has been gathered together and sifted out of a large number of incompetent men that have been sent down here from the States.

I hand you with this letter the annual reports for the year ended June 30, 1905, of all the division engineers, chiefs of bureaus, and heads of subordinate departments, which cover the detail of the work enumerated above, as well as many other minor matters not mentioned. These reports cover the information asked for in your question No. 2.

Replying to your question No. 1, as to the "present condition of the work:"

The organization is now in working order, and while some of the positions in that organization have not been filled, efforts are being made to fill them as rapidly as possible.

The mechanical department is in good condition and able to meet all the requirements of the work as it now exists, and preparations are being made for its expansion as the work progresses.

The bureau of waterworks, sewers, and roads is well organized, and is conducting its work as rapidly as the supply of men and material will allow. The same is true of the bureau of architecture and building.

The technical work is so far advanced that sufficient data is on hand to allow of tentative plans being made for the completion of the canal. The organization on both the La Boca and Cristobal divisions is in proper shape for the commencement of actual construction work upon a large scale, either by contract or directly by the Government, as soon as the dredges, with the attendant barges and tugs, are provided.

At Culebra the work has reached a stage where no great expansion is possible without a large amount of preliminary work being done. This preliminary work consists of the construction of a large amount of railroad track,

for which a corresponding amount of grading has to be done. Also, the diversion of certain streams preparatory to carrying on excavations on a large scale; the building of roundhouses for the care of locomotives, the construction of storage yards, and numerous connections between the existing tracks and tracks to be constructed with the Panama Railroad; also the double tracking of the latter and the preparation of numerous dumping grounds and of tracks leading to them; also the installing of modern drilling machinery. All this preliminary work requires a large number of laborers. Five thousand additional laborers could be used to advantage at once and have been asked for for some weeks.

The labor that we have at the present time is very inefficient and is made more so by its scarcity. The laborers know that we are entirely dependent upon them and the result is inefficient service.

Nineteen additional steam shovels are under contract to be delivered between now and the 1st of January, 1906, and unless this preliminary work is done it will be impossible to put these steam shovels to work as they are received. The work as now being carried on at Culebra is being done at a great disadvantage on account of lack of preparatory work that should have been done during the dry season. On the 1st of last January a large amount of preliminary work in the way of track laying was planned. Owing to the lack of men, material, and tools these plans were not carried out, the supply of men and material being barely sufficient to lay the track for the installation of steam shovels as fast as they were erected, and this track was of necessity laid in the most temporary manner. All of the men and material available were used upon this work, and practically nothing was done toward surfacing the new tracks, as well as those already in existence, and putting them in proper shape to withstand the effects of the wet season, the result being that when the rains commenced the tracks became almost impassable and have been in such a condition a large part of the time since then.

The track laid by the French company, and that which has been laid since the work was turned over to the United States Government, was all laid with Belgian rail brought to the Isthmus by the French company. This rail was very poorly designed, the width of the base being altogether out of proportion to the height, the rail being $3\frac{1}{2}$ inches wide at the base and $4\frac{1}{2}$ inches high. These rails were made in 6-meter lengths. Owing to the fact that requisitions for tie plates which were made in November last were not filled until June, and also owing to the fact that the spikes furnished us on the first requisitions were too short, and owing to the fact that this rail was laid on soft wood ties, a great deal of difficulty has been experienced in keeping the track in proper condition. This combination of a high, short rail with a narrow base, laid upon soft wood ties without tie plates, and with short spikes, forms a track that can not be expected to stand up under ordinary traffic.

Added to this is the fact that the Belgian locomotives now in service are very rigid and do not adapt themselves to the inequalities of temporary track such as must necessarily exist over a large part of our work. The result has been that numbers of derailments have taken place daily, causing serious interruption to the work.

We now have on the Isthmus a sufficient quantity of new 70-pound rail of American Society pattern in 33-foot lengths, with proper fastenings and tie plates, and a part of the preliminary work that is planned and which it is necessary to carry out before we can expect much increase in the efficiency is to relay all of our present tracks with this rail. But we have not the laborers at present to do this work. Our track work has been very much delayed by the lack of proper tools. Requisitions for track tools made last November were not filled until June.

When the wet weather came on the track conditions mentioned above were very much aggravated; derailments, which were frequent before, became much more so; a large part of the clayey material handled by the steam shovels became so sticky that it would not clear itself from the French dump cars, and most of it had to be shoveled out by hand.

The dumps themselves have sloughed off and settled, taking a large force of men to keep them in serviceable condition. The remedy for this latter trouble is the establishment of a large number of dumps of a height varying from 10 to 20 feet. Dumps of that height will not settle and slide sufficiently to cause trouble. The establishment of these dumps has been planned, but the plans have not yet been carried out owing to the lack of laborers.

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While a large amount of plant has been ordered, the plant in use at the present time (with the exception of the new steam shovels) is all old French plant. With new track properly ballasted and surfaced and the installation of new cars, locomotives, Lidgetwood unloaders, bank spreaders, and modern drilling machinery the establishment of dumps of the proper height and with tracks leading to them, the troubles that we are now having will be largely done away with and the output of the steam shovels increased to something like their capacity.

In other words, the steam shovels must be supplemented by other modern machinery and proper track conditions before they can properly perform the service for which they are intended; all of which has been planned, but the execution of these plans has been delayed owing to lack of material and men.

One of the most pressing needs at the present time is proper quarters for housing men. Men have been sent from the States much more rapidly than we could provide accommodations for them. This was owing to the fact that requisitions for lumber were not promptly filled. At the present time a large proportion of the men who have come to the work from the United States are occupying dilapidated quarters upon which repairs have not yet been made. In many cases such men are sleeping upon canvas cots without mattresses or pillows, or without any other furniture in the room, and the majority of them are doing so without complaint, notwithstanding the fact that they were promised good, comfortable, furnished quarters when they left the States.

Within the last day or two furniture has been arriving on the Isthmus which was asked for by requisition months ago.

All of the work is very much handicapped by the congested condition of affairs upon the Panama Railroad, including the wharf facilities at Colon. This is particularly true with regard to the unloading and handling of lumber.

A great deal of difficulty is experienced in getting men to come down here from the States and retaining them when they do come. Yellow-fever scares have done a great deal toward keeping such men away, and part of the difficulty is due to the general conditions that men find when they arrive here. It is very necessary, in order to carry on successfully and economically a work of this magnitude, that an "esprit de corps" be engendered amongst all the employees, and one of the first requisites of such a condition is to have men satisfied with their surroundings. Most of the men who come down here from the States are isolated from their homes and families. There is practically nothing in the way of amusements or anything to occupy the time of the men when they are not at work. For this reason it is very essential that good, comfortable, furnished quarters be provided for the men. That these quarters are not in existence to-day is due to the fact that the material with which to construct them has not been furnished until the present time, notwithstanding the fact that it has been asked for for months.

Very truly, yours,

W. E. DAUCHY,
Acting Chief Engineer.

ISTHMIAN CANAL COMMISSION,
Ancon, Canal Zone, August 1, 1905.

T. P. SHONTS, Esq.,

Chairman Isthmian Canal Commission.

SIR: In compliance with your request that I submit a special report on my observations on the Isthmus, so far as they relate to the present condition of the work of canal construction and the things accomplished under the administration of Mr. John F. Wallace, recently chief engineer, I have the honor to submit the following:

Mr. Wallace was appointed chief engineer to date from June 1, 1904. He arrived upon the Isthmus and assumed charge of the office in Panama July 2, 1904. His resignation was accepted to date June 28, 1905. His administration therefore covers substantially the fiscal year ending June 30, 1905. There are on file in the office here annual reports from the various division engineers and chiefs of bureaus covering this period, which give in detail the work accom-

plished in each division and bureau. There are also several special reports upon certain surveys, examinations, borings, etc., inaugurated or prosecuted during the year. Mr. Wallace himself submitted a report to the Commission dated February 1, 1905, covering his work up to that date. From a careful examination of all these reports, from observations on the ground, and from conferences with the engineers and others, I have endeavored to prepare a condensed statement which will give in brief form the results accomplished.

ORGANIZATION.

Upon assuming charge of the work Mr. Wallace found a force of some 600 men at work in the Culebra cut under an American resident engineer, using the old French organization and plant; and four surveying parties in the field, with headquarters at Colon, Gatun, Bohio, and Bas Obispo, respectively. The department of material and supplies was in charge of an employee who had performed the same duties under the two French companies, under the general supervision of an officer who had also various duties in the civil government. He proceeded without delay to organize the Panama office, with an "office engineer," a private secretary, and the necessary stenographers and clerks. On July 5 he created the "mechanical department of the engineering and construction department," placing in charge of it a competent mechanical engineer, with instructions to immediately examine all the machinery available on the Isthmus and to organize the department for the repair of machinery and for the maintenance of machine shops at Colon, Bas Matachin, and Empire. On the 19th of July he created the office of supervising architect, placing in charge of it a competent architect, who was charged with making plans and estimates for new structures and superintending their construction, and with the supervision of the alterations and repairs of existing structures, also with the location of highways and laying out of grounds. On the 19th of July he created also the department of waterworks and sewers, placing in charge of it a competent civil engineer, with instructions to give his first attention to the water supply and sewerage system of the city of Panama.

On the 16th of August he appointed a general quartermaster, who was charged with the selection and assignment to quarters of the employees; he was also to have charge of all records pertaining to the personnel, the supervision of pay rolls and requisitions, and of the correspondence connected with applications for employment. The duties of this office were increased March 10, 1905, by assigning to it the duty of meeting all new employees arriving by ship, furnishing them with information and transportation to the proper stations, and assigning laborers to the proper bureaus and divisions as the exigencies of the service might require. They were further increased June 1, 1905, by transferring to it from the bureau of supplies all transportation matters, including transportation by wagon and team, by the Panama Railroad, and by steamship lines. During the month of August the bureau of map making, lithography, and printing was established, including a drafting office, a lithographing establishment, and a printing and bookbinding establishment. On the 7th of December the bureau of material and supplies was reorganized. On the 14th of June a bureau of meteorology and

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river hydraulics was created. A bureau of communication also was established to supervise the telegraph and telephone service.

For carrying on the work of canal construction five divisions were created, four of them on the line of the canal and a fifth to cover the Gamboa dam site and the Chagres River. The Colon division covers the territory from Colon to Bohio, including Colon Harbor. The Chagres division extends from Bohio to Bas Obispo; the Culebra division from Bas Obispo to Miraflores, and the La Boca division from Miraflores to Panama Bay. It was proposed to place a division engineer in charge of each, with one or more assistants as the work developed, but at the end of the year only two division engineers had been appointed, one in charge of the Colon and La Boca divisions and the other in charge of the other three.

The organization as finally left by Mr. Wallace is announced in his circular, No. 32, dated May 30, 1905, a copy of which is inclosed. There are eight so-called "bureaus" in the office and five construction divisions in the field. The number of bureaus seems excessive, and the number of construction divisions which will be needed can not be stated with precision until the plan of the canal is finally determined.

WORK ACCOMPLISHED.

The work of the year was mainly preparatory.

BUILDINGS AND GROUNDS.

The number of buildings received from the French company was 2,145. Of these, 22 were destroyed and 357 repaired, leaving 1,766 still to be repaired. Forty-eight new buildings were constructed, including 7 hospitals, 2 operating rooms, 1 jail, quarters for married men, and quarter for single men. Fifteen additional new buildings were under construction. About 2,000,000 feet of lumber was used, of which about 820,000 was in new construction and the remainder in repairs. At the end of the year 1,232 artisans and laborers of all classes were employed in this work. A very large number of additional new buildings are required, for which type drawings have been prepared. A list of those thus far authorized is appended. It may be roughly estimated that not more than one-quarter of the work eventually required to provide proper buildings for the canal constructions has been done. About 3,500,000 feet of lumber has arrived or is about to arrive on the Isthmus.

MACHINERY AND EQUIPMENT.

The small shops at Culebra for light repairs to the plant employed there were in operation at the beginning of the year. The general machine shops left by the French were overhauled. At Bas Matachin operations began July 11, 1904; at Empire operations began October 1, 1904, and at Colon operations began October 1, 1904. The buildings for shops and quarters at all these places were in very bad condition. They were rebuilt, and considerable extensions or new buildings were begun. The machines, though somewhat antiquated, were in fairly good condition, having been carefully oiled and coated with white lead when the shops were closed, but most of them required

new foundations. Old machines were put in order, and new machines from the United States were installed. The principal shops are at Bas Matachin. At the end of the year the capacity of the shops at that place were sufficient to overhaul about 5 locomotives and 160 French dump cars per month, besides much miscellaneous work. The capacity of the foundry was about 50 tons of iron castings and 3,000 pounds of brass castings per month. The enlargement contemplates a capacity of 20 locomotives and 300 French dump cars, besides miscellaneous work and three times the present foundry capacity. The work of fitting up the Bas Matachin shops may be roughly estimated as 40 per cent completed, and of the Colon and Empire shops as 50 per cent in each case. Plans have been made for new shops at Pedro Miguel, but work on them has not been begun.

These shops have been employed in overhauling and repairing old French plant, particularly locomotives and dump cars. At the end of the year the number of locomotives in service was 58 and the number of cars 727. There had been repaired and sent from the shops 70 locomotives and about 1,000 cars. As nearly all of this rolling plant will be replaced by modern American plant, these extensive repairs can not be considered judicious.

The only modern plant which worked during the year were the 10 American steam shovels in Culebra cut, of which the first one began work in November. A large amount of additional plant was ordered, some of which has arrived upon the Isthmus.

A small machine shop for marine work, marine ways, and a "grid-iron" at La Boca were taken over from the Panama Railroad and are in good working order. One steam launch was rebuilt there, and work begun on two additional steam launches and a self-propelling hopper barge.

WATERWORKS, SEWERS AND ROADS.

Water for the city of Panama is obtained from a small lake created by a dam across the Rio Grande River, originally constructed by the French. The work of raising and strengthening the dam was begun August 15, 1904. Water was let into the pipe line as far as Ancon June 23, 1905. In the city of Panama about 34 per cent of the water mains were laid. The excavation for the distributing reservoir at Ancon was completed, but little progress was made in the construction of the concrete basin. The city in the meantime is supplied with water by direct pressure. A sewer system for Panama was adopted and work begun October 19, 1904. At the end of the year about 25 per cent of the sewers had been laid. All the material for water pipes and sewers is on the ground. A project for paving the streets of Panama was adopted late in the year, and the material was ordered, but no work was done.

A project for the water supply of Colon was adopted about the middle of April, but very little work of construction was done. A system of sewers for a portion of the town was adopted in February, 1905, but very little progress was made in construction.

At Culebra a new collecting reservoir was built west of the town, taking water from a series of springs, and the old French system at this place was otherwise improved and enlarged. Temporary arrangements for a water supply were made at various other places along the line of the canal, but much additional work will be required

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at Culebra, Obispo, and Gorgona in the immediate future and at other places later on, both for a water supply and for sewerage.

A considerable amount of work was done upon the construction and repair of roads near Panama, for which two stone crushers were installed.

WHARVES.

The old French wharves in the inner harbor at Colon were completely rotted away and destroyed. Three new pile drivers with small hammers were built from the old material on hand, and pile driving begun the latter part of December. At the end of the year a total length of 1,325 feet of wharf 24 feet wide had been constructed, of which 400 feet was available for vessels drawing 20 feet, 600 feet for those drawing 18 feet, and 200 feet for those drawing 16 feet. The remainder is in water so shoal that it is of no value until dredging can be done in front of it. A large extension of these wharves is immediately needed.

One of the old French dredges and two self-propelling hopper barges were repaired and put in operation May 24, deepening the channel leading to the wharves. There were removed 60,700 cubic yards of soft mud.

At La Boea, in addition to the permanent wharf of the Panama Railroad Company, a pile and timber wharf 650 feet long was begun, and at the end of the year was about one-fifth completed.

Dredging at this place, which has been regularly carried on since 1898 by the Panama Railroad Company, was transferred to the canal June 1, 1905. During June 61,800 cubic yards were removed. The plant employed is one chain-of-bucket dredge, two self-propelling hopper dredges and one steam launch, all in good condition.

CANAL EXCAVATION.

The only point at which the excavation of the canal proper was carried on was at Culebra. During the first part of the year this work was done exclusively with the French equipment. The French excavators were gradually replaced by American steam shovels, beginning in November and ending in June. The total amount of material removed during the year was 741,644 cubic yards, of which 93,052 cubic yards were hard rock; 254,252 cubic yards soft rock, and 391,340 cubic yards earth. Careful records were kept of the various elements of cost, meaning thereby those elements which would make up the cost to a contractor, and not including the surveys necessary to lay out or measure the work or the higher administration. The average cost per month during the year was, for—

	Cents.
July	65.4
August	50.6
September	57.3
October	54.1
November	50.1
December	52.8
January	47.8
February	46.5
March	43.3
April	52.5
May	83.8
June	102.7

In his report of February 1, 1905, Mr. Wallace expressed the opinion that the average cost of excavating the Culebra cut would not exceed 5) cents per cubic yard, basing his opinion on such of the above figures as had been obtained up to that time. This opinion led the engineering committee of the former commission to a conclusion of vast importance, which was no less than to recommend that the canal be constructed at the sea level instead of upon the plan with locks adopted by Congress. If these figures prove anything they prove that the estimate submitted to Congress in 1901, of 80 cents per cubic yard, is not far from correct. The fact is, however, that they give data for the cost only at the present levels of excavation and with an unsatisfactory equipment. They will be increased as the level of the cut descends and the distance of the dumps increases. They will be decreased by increased efficiency of the equipment. They are to be considered in connection with the data previously collected, but they are not of themselves entitled to the weight which has been given them. The new machines are very efficient, but the tracks and dumps are in a horrible condition and entirely inadequate to serve the shovels. This is attributed to an insufficient supply of labor and faulty pattern of the French rails employed.

SURVEYS.

The various dam sites at Bohio were examined and numerous borings were made, throwing important light upon the question of the site to be selected and the best method of constructing the dam.

Numerous borings and soundings were taken in the line of the canal and in Limon Bay.

Surveys and borings were made to determine the practicability of a dam at Gatun, to determine the advisability of the proposed Tiger Hill cut-off, and to determine the practicability of a dam at San Pablo and at Gamboa. Extensive explorations, surveys, and borings were made to determine the area of the lake to be formed by a dam at Gamboa and the practicability of constructing tunnel spillways. Numerous minor surveys were made to locate tracks, to correct topography, to double-track the Panama Railroad, to test local changes of location both of the canal and of the railroad, and to locate piers, buildings, and tracks. At the end of the year a survey had been begun near the Panama end of the canal, which is to include the old canal and adjacent topography of the valley, including borings, but little progress had been made, and a survey was in progress to determine the practicability of an open cut to replace the proposed Gatuncillo tunnel spillway.

FOOD SUPPLY.

No steps appear to have been taken to insure a proper supply of food to the employees. The regular supply in the country is inadequate and the prices are exorbitant. This question is of quite as much importance as that of providing quarters. No large increase in the force should be made until it has been properly settled.

FORCE EMPLOYED.

At the end of the year 1,504 gold employees and about 7,000 silver employees were in the service. The laborers are very inefficient. In nearly every department progress is impeded by lack of labor, and it is estimated by the division engineer at Culebra that 5,000 additional men are needed for that place alone. There are no adequate facilities at present for housing and feeding these men.

PANAMA RAILROAD.

The work of replacing the old rails with new steel rails of heavier pattern was inaugurated before Mr. Wallace took charge. At the beginning of the year about 6 miles of new rails had been laid and during the year about 25 miles additional was laid. The material for completing the work is on the Isthmus.

It was decided in April to double-track the road. Very little cutting is required for the purpose, most of the grading being effected by fill. Most of the cutting was completed, except at Gorgona, where there is an earth cut, and between Matachin and Las Cascadas, where there are several rock cuts. It is proposed to use material taken from Culebra to make the necessary fills. Practically nothing in that direction was done.

Of the 96 culverts to be extended, about 20 had been completed at the end of the year. The material for the trestle bridges was ordered from New York; it does not include the long metal bridge over the Chagres.

New equipment was ordered, consisting of 24 locomotives, 6 passenger cars, 500 box cars, 12 cabooses, 2 75-ton wrecking cranes, and an all-steel piledriver.

The dividing line between the work done for the railroad and that done for the canal has not always been the same. For example, the new wharf at La Boca was begun by the canal and then transferred to the railroad. The shops and marine ways at the same place, formerly maintained by the railroad, were transferred to the canal. Nor has the line been clearly defined. The railroad installed the La Boca waterworks and the Ancon electric-light plant; also the ice plant and the electric-light plant at Colon.

Various minor improvements were made in the road, of which the most important was the new "Y" at La Boca Junction. The force employed upon the Panama Railroad is not included in the numbers given above.

The general result of my observations is that good progress has been made in the work of preparation, and that it would have been greater if it had not been hampered by the attempt to "dig dirt" in the Culebra cut.

Very respectfully, your obedient servant,

O. H. ERNST,
Colonel of Engineers.

[Circular No. 82.]

ISTHMIAN CANAL COMMISSION,
DEPARTMENT OF CONSTRUCTION AND ENGINEERING,
Panama, May 30, 1905.

The following organization of the department of construction and engineering is announced, to take effect June 1:

DEPARTMENT OF CONSTRUCTION AND ENGINEERING.

John F. Wallace, member of Isthmian Canal Commission; member of executive committee; chief engineer.

_____, first assistant chief engineer, in charge of technical studies and construction in the field.

_____, principal assistant engineer, in charge of records and office.

John Seager, private secretary.

H. F. Tenney, assistant private secretary.

COLON CONSTRUCTION DIVISION.

[Comprising the territory on the line of the canal from Colon to Bohio.]

F. B. Maltby, division engineer.

_____, assistant division engineer.

E. P. Thompson, chief clerk.

CHAGRES DIVISION OF CONSTRUCTION.

[Including the line of the canal from Bohio to Bas Obispo.]

W. E. Dauchy, division engineer.

_____, assistant division engineer.

William E. Swift, resident engineer.

GAMBOA DIVISION OF CONSTRUCTION.

[Including the Gamboa dam site and Chagres River.]

W. E. Dauchy, division engineer.

_____, assistant division engineer.

C. L. Carpenter, assistant engineer.

CULEBRA CONSTRUCTION DIVISION.

[Including the territory from Bas Obispo to Miraflores.]

W. E. Dauchy, division engineer.

_____, assistant division engineer.

H. F. Dose, resident engineer in charge of construction.

W. B. Ruggles, resident engineer in charge of survey.

A. B. Nichols, resident engineer in charge of technical work, canal prism.

_____, superintendent of transportation.

_____, superintendent of excavation.

_____, superintendent of mining.

_____, superintendent of dumps.

E. Zook, assistant engineer, superintendent of tracks.

Sydney J. Kennedy, chief clerk.

LA BOCA DIVISION OF CONSTRUCTION.

[Including the territory along the canal from Miraflores to the sea.]

F. B. Maltby, division engineer.

_____, assistant division engineer.

A. C. Harper, resident engineer.

Bureau of personnel, transportation, and quarters.

E. L. King, general quartermaster, chief of bureau, Panama.
R. E. Wood, assistant general quartermaster, Empire.
James M. Maguire, assistant general quartermaster, Panama.
_____, assistant general quartermaster, Colon.
C. L. Parker, chief clerk.

Bureau of supplies.

E. C. Tobey, chief of bureau.
Victor S. Jackson, assistant.
H. Leonard, chief clerk.

Bureau of water works, sewers, and roads.

C. E. Davis, chief of bureau.
Henry W. Durham, resident engineer, Panama.
Ernest W. Clarke, resident engineer, Colon.
Earle C. McFarland, chief clerk.

Bureau of machinery and equipment.

George D. Brooke, chief of bureau.
Carl A. Strom, superintendent of motive power and machinery.
Earl J. Banta, master mechanic, Panama.
E. T. Paterson, office assistant.
E. C. Cummings, master mechanic, Bas Metachan.
Upton Lorentz, master mechanic, Empire.
E. C. Harrington, master mechanic, Cristobal.

Bureau of architecture and building.

A. M. Burtt, supervising architect, chief of bureau.
P. C. Wright, Jr., assistant supervising architect, in charge of office.
J. H. Barbour, chief clerk.

Bureau of meteorology and river hydraulics.

R. Arango, resident engineer, chief of bureau.

Bureau of map making, lithography, and printing.

C. F. Bertocini, chief of bureau.

Bureau of communication.

C. F. Annett, chief of bureau.

EXHIBIT E.

ORGANIZATION OF WASHINGTON OFFICE.

OFFICE OF THE ISTHMIAN CANAL COMMISSION,
Washington, D. C., June 21, 1905.

On April 3, 1905, the Isthmian Canal Commission in full session adopted the following resolution:

The Commission considered the subject of office organization in Washington, in view of the resolutions adopted at this meeting and the concentration of practical work more largely upon the Isthmus.

Thereupon it was duly and unanimously

Resolved, (1) That so far as practicable the work of the Commission be concentrated on the Isthmus of Panama and that the Washington office be conducted upon this basis; and that the Commission proceed in the examination and consideration of the present organization and personnel thereof in the Washington office for action of the Commission in due course.

Resolved, (2) That for greater effectiveness in the administrative work of the Commission there is hereby established at Washington an "office of administration" for the conduct of such operations as the Commission may from time to time determine to there conduct, and which shall include—

Records concerning all purchases and delivery of material and supplies (including commissary stores).

Fiscal affairs.

General books of account, containing details of all transactions of the Commission in the United States and adequate summary of all other accounts on the Isthmus, duplicate accounts in summary being regularly transmitted from the Isthmus to the Washington office; vouchers and contracts to be taken in sufficient number in original to at all times furnish to the office at Washington a complete and original set thereof.

General auditing and accounting.

Correspondence of the Commission in the United States.

Orders and directions from the President and the Secretary of War.

Engineering reports and plans.

Reports from officials and committees of the Commission.

Reports of the Commission and its officers and committees to the Secretary of War, the President, and Congress.

The duties outlined in the above resolution being comprehended within the chairman's, or first department, as set forth in the Executive order dated White House, April 1, 1905, the chairman, with the approval of the Commission, and pursuant to authority conferred in such order, on April 12, 1905, appointed a chief of office, with an assistant, to be the executive officer in the conduct of isthmian canal affairs in the United States. This officer, in representation of the chairman and the Commission, is in charge, under the chairman, of the office of administration, reporting and responsible to the chairman while he is present, and in his absence to the Secretary of War.

The officer so appointed is Col. Clarence R. Edwards, U. S. Army.

The duties imposed upon the office of administration will be performed by sections, or divisions, as follows:

(a) *Central office, or office of administration proper.* In direct charge of the assistant chief of office, W. Leon Pepperman, appointed April 12, 1905.

This office is charged with the preparation of all correspondence for the signatures of the Secretary of War, the chairman, the chief of office, and his assistant, and the keeping of the records thereof. This duty will comprehend the exchange of cables between the Washington office and the Isthmus, the promulgation of all orders of the President, the Secretary of War, the Commission, its executive committee, and chairman; keeping a record of the proceedings of all meetings of the Commission and its subordinate committees; the making of all appointments, in representation of those vested with the power of appointment, as specifically delegated, and the transportation of appointees to the Isthmus; the care of the building and necessary office supplies and fixtures.

Correspondence relating solely to the specific duties of the respective offices as hereinafter set forth, and involving no new administrative principle or policy, is to be disposed of in the divisions, or offices, to which it pertains, and the record kept therein; but other correspondence, including all correspondence with other departments, bureaus, and commissions of the Government, is to be conducted through the central office.

(b) *Office of the general auditor.* Ernest S. Benson, general auditor, appointed April 27, 1905.

This office is charged with the administrative examination of all accounts of the United States lands, as required by section 22 of an act of Congress approved July 31, 1894; it is charged with the examination of all claims receivable and payable, in advance of settlement by collecting and disbursing officers; with the auditing of accounts of property; with the compilations concerning the operation of the construction, sanitation, and other departments under the Commission; and with the final audit of all accounts of the government of the Canal Zone, as well as with the control and final audit of the accounts of the Panama Railroad and Steamship Company.

(c) *Office of the general purchasing officer.* David W. Ross, general purchasing officer, appointed June 1, 1905.

This office is charged with the purchase and shipment of all material and supplies relating to Isthmian Canal affairs, including the Panama Railroad, which may be called for on duly approved requisitions.

(d) *Office of the disbursing officer.* James G. Jester, disbursing officer, appointed May 1, 1905.

This office is charged with the safe receipt and disbursement of the funds of the Commission, upon proper vouchers.

(e) *Office of the committee on engineering.*

This office will perform the duties set forth in the resolution of the Isthmian Canal Commission of May 3, 1905, providing for a committee on engineering, selected from the membership of the Commission, and will be in charge of such member of the engineering committee of the Isthmian Canal Commission as the chairman or acting chairman of that committee may designate.

Officers in charge of sections, or divisions of work above outlined, are authorized to grant leaves of absence to their respective subordinate forces, consistent with the needs of the service and the laws governing the granting of leaves of absence in the departmental services at Washington.

All appointments, promotions, reductions, and removals must be approved by the chief of office.

T. P. SHONTS,
Chairman Isthmian Canal Commission.

The following extracts from the minutes of the one hundredth meeting of the Isthmian Canal Commission, held October 30, 1905, are appended as showing changes in the above organization:

The resignation of Col. C. R. Edwards as chief of office, to take effect November 15, 1905, was offered, and, upon motion, it was—

Resolved, That the resignation of Col. C. R. Edwards as chief of office be, and the same hereby is, accepted to take effect November 15, 1905.

Commissioner Ernst offered the following resolution, which, upon motion, duly seconded by Commissioner Endicott, was adopted, viz:

Whereas, The work of organizing the office of administration at Washington has now been practically completed, and the chief of office has resigned:

Resolved, That the office of chief of office, as created by the order of the Commission dated June 21, 1905, be, and the same hereby is, abolished on and from the 15th day of November, 1905; and it is further

Resolved, That wherever in said order of June 21, 1905, or in any other order of the Commission or its chairman, or otherwise, powers, duties, and directions are conferred or imposed upon the officer entitled "chief of office," the same shall be, and hereby are, conferred or imposed upon the officer entitled the "assistant chief," who shall possess and exercise the same as if the same had originally been charged upon the last-named officer. All such previous orders and directions are hereby amended and modified in accordance herewith, and all orders and directions inconsistent herewith are hereby revoked.

The Commission, in further consideration of the organization of the Washington office, considered the duties and title to be assigned to the office of secretary.

Upon motion of Commissioner Ernst it was—

Resolved, That the office now held by Mr. Joseph B. Bishop, as executive secretary, be known and designated as "secretary of the Commission;" and that it shall be the duty of the secretary of the Commission to keep the minutes of the Commission and have custody of the same; to attend to the giving and serving of all notices of meetings of the Commission; to collect, prepare, and maintain a general historical record and data of the history of the Panama Canal and the salient features of the history and progress of the Isthmian Canal, particularly from the time of its acquisition by the United States, and to prepare and submit to the Commission, from time to time, digests, indexes, and summary of the same; and, generally, to perform such other duties as may be from time to time assigned to him by the Commission or its chairman.

Upon motion of Commissioner Ernst, seconded by Commissioner Hains, it was:

Resolved, That to facilitate the dispatch of current business at Washington office of the Commission, the chairman be, and he hereby is, empowered to authorize and direct in writing the secretary of the Commission or other employee of the Commission, to approve for payment, under the caption "By direction of the chairman" vouchers for any payments by the Commission, and to make requisition for supplies for the maintenance of said Washington office.

EXHIBIT F.

**ORGANIZATION OF DEPARTMENT OF CONSTRUCTION
AND ENGINEERING, SEPTEMBER 1, 1905.**

OFFICE OF THE CHIEF ENGINEER,
Ancon, Canal Zone, August 29, 1905.

The following organization for conducting the business of this department will become effective September 1, 1905.

JNO. F. STEVENS,
Chief Engineer.

Approved:

T. P. SHONTS, *Chairman.*

GENERAL ORGANIZATION.

REPORTING DIRECTLY TO THE CHIEF ENGINEER.

Secretary.—He will have charge of all clerical work and forces, correspondence, reports, and files of the chief engineer's office, and will represent that official in such matters as may from time to time be assigned to him.

Assistant chief engineer.—He shall, under the direction of the chief engineer, and acting through the division engineers, assist the chief engineer in carrying out all work of surveys and construction of the canal and its accessories, and division engineers will receive and be governed by his instructions.

He will also, through the office engineer, have general charge of the compiling or making of all engineering data, records, and plans, and the custody of all such data, records, and plans received or filed in the office of the chief engineer.

All principal or assistant engineers assigned to special surveys will report to him and be governed by his instructions.

He will also attend to such other duties as may be assigned to him from time to time by the chief engineer.

Manager of labor and quarters.—Will have charge of the employment of all labor at such points as may be assigned him by the chief engineer. He will be charged with the duty of receiving and making proper provision for all employees on their arrival, and will assign them to work in their proper places, according to the needs of the service.

He will also assign quarters to employees as provided in the rules of the Commission, and will have charge of all such quarters and the furnishing of same as directed from time to time by the chief engineer.

He will also inspect such hotels or other buildings, and the necessary accessories thereto, as may be owned by or provided by the Commission for the welfare, comfort, and recreation of its employees.

He will also, through his chief clerk, have charge of the general personal records of all employees, and will make such reports from time to time as may be directed by the chief engineer.

He shall, with the approval of the chief engineer, and within the established rules, appoint such field superintendents and clerical forces as may be necessary to properly conduct the affairs of his office.

Superintendent of motive power and machinery.—Shall be charged with the proper maintenance and repair of all machinery used or provided in or about the construction of the canal.

He shall issue instructions covering standard designs and methods for the guidance of all employees in charge of or connected with the machinery employed, as noted above.

He shall, from time to time, through the proper officials, give such instructions concerning the organization, discipline, size of force, and methods of execution of the different items of work as, in his opinion, may be necessary to secure the efficient economical operation of his division.

He shall keep in his office a complete physical record of all machinery equipment bought for or used in the construction of the canal, and shall also keep copies of all standard drawings pertaining to his division.

He shall design, or cause to be designed, all plans for improvements or additions to the mechanical devices of all shops, engine houses, and similar facilities.

He shall, through the proper officials, direct the operation of all shops, engine houses, and their accessories, and shall pass upon the qualifications of all men assigned as stationary or locomotive engineers and firemen, and will be responsible for the proper care and condition of all mechanical power and equipment.

He shall, through his chief clerk, be responsible for all clerical work of his division, and shall make such reports and returns covering same as may be ordered.

He shall aid the chief engineer in the construction and maintenance of all mechanical appliances and perform such other duties as may from time to time be assigned him.

Architect.—He shall design, make estimates, bills of materials, and specifications for all buildings or other structures intended for the use of the Commission or of its employees, and shall submit the same from time to time to the chief engineer for his action.

He shall at all times keep in his office and be responsible for original plans of all buildings or other structures belonging to or occupied by the Commission or its employees.

He may, with the approval of the chief engineer, employ such assistance as may be necessary to enable him to properly conduct the affairs of his office.

Master builder.—He shall have charge of the construction, whether by Commission forces or by contract, of all buildings or other structures erected for the use of the Commission or of its employees.

He shall have charge of all reconstruction or heavy repairs of existing buildings or structures the property of the Commission.

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He shall make requisitions, subject to the approval of the chief engineer, for all materials required in the construction of all buildings or other structures that may be authorized.

He shall personally, and through the proper superintendents, foremen, and inspectors, exercise such supervision over all work in his charge as may be necessary to insure its prompt and economical completion.

Through his chief clerk he will be responsible for the correct execution of such clerical work, including reports, as may be necessary in conducting the business of his division.

OTHER OFFICERS, REPORTING AS INDICATED BELOW.

Principal assistant or assistant engineers.—On special surveys they will report to the assistant chief engineer and be assigned by him to such duties as from time to time may be found necessary.

They shall be authorized, under the established rules and with the approval of the assistant chief engineer, to employ such assistants in carrying out their work as may be found necessary.

Office engineer.—He shall report to the assistant chief engineer and through the chief draftsman make all plans, estimates, memoranda, or data that may be required in the actual construction of the canal.

He shall compile and make from time to time, as ordered, such engineering reports as may be required, and shall be responsible for the intelligent and exact care of all engineering data, reports, plans, estimates, and records pertaining to the surveys, preliminary and working plans of the canal.

Division engineers.—They shall, on or in their respective divisions, subject to the approval and direction of the chief or assistant chief engineer as provided, be supreme in authority over the work assigned to them and will be held responsible for the proper execution of the same.

Through their subordinate officials, as indicated by this code, they will give such orders and secure such reports as in their opinion may be necessary to enable them to secure the quickest, most efficient, and economical operation of their division, it being the policy of the chief engineer that each head of a division be left free to work out the details of carrying forward his assigned task, and that correct, speedy, and economical results will be recognized as the standard of success.

In so far as the established rules of the service will permit, division engineers will be free to select their subordinate officials of all grades, and the matter of discipline of all men on their division will be left in their hands, subject to the approval of the chief engineer.

Division engineers will, through their chief clerks, be held responsible for all clerical work and the matter of timekeeping and pay rolls must be given sufficient personal attention to insure absolutely correct and quick results.

Mechanical engineer.—He shall, under the direction of the superintendent of motive power and machinery, have charge of records, plans, and data pertaining to the mechanical features of the division.

He shall make or cause to be made all plans, specifications, and estimates for all mechanical appliances necessary for any part of the work that may develop.

He shall carefully inspect the working of all machines and machinery and report the condition of same, and, in general, attend to the technical mechanical duties of the division, and, with the approval of the superintendent of motive power, his instructions in such matters will be obeyed by all employees of the division. He shall also perform any other duties that may be assigned him by the head of the division.

Heads of all divisions will give prompt attention and quick response to the request of the head of any other department for information necessary to enable the latter to carry out his work with the greatest facility.

They will also be governed by the principle that their division is a coordinate branch of a great organization and that only by the most complete and harmonious cooperation can the best results be secured. Perfect teamwork must be the keynote of the whole proposition.

General organization, September 1, 1905.

Chief engineer.

Secretary.

General clerical force.

Assistant chief engineer.

Principal assistant engineers.

Office engineer.

Chief draftsman.

Division engineers.

Assistant engineers, special service.

Manager labor and quarters.

Field superintendents.

Inspector of hotels.

Clerical force.

General personal records.

Superintendent motive power and machinery.

Mechanical engineer.

Master mechanics.

Superintendent shops.

Foremen roundhouses.

Foremen car repairs.

Master builder.

Architect.

Superintendents.

Foremen.

CULEBRA DIVISION—ORGANIZATION.

Division engineer.

Assistant division engineer.

Chief clerk.

General clerical force.

Timekeepers and pay rolls.

Material accounts.

Resident engineers.

Assistant engineers.

Contract work.

Inspectors.

Superintendent of transportation.

Train masters.

Train and engine men.

Yardmen and switchmen.

Dispatchers.

Telephone operators.

Division engineer—Continued.

Superintendent of track.

General foremen.

Foremen—Track, construction, and maintenance.

Superintendent of excavation.

General foremen.

Foremen—Engineers, firemen, cranesmen, etc.

Superintendent of mining.

General foremen.

Foremen—Drillers, powder men, etc.

Superintendent of dumps.

General foremen.

Foremen—Switching crews, dump laborers.

Master carpenter.

Fuel and water stations.

Maintenance of structures.

COLON, CHAGRES, AND LA ROCA DIVISIONS—ORGANIZATION.

Division engineer.

Chief clerks.

General clerical force.

Timekeepers and pay rolls.

Material accounts.

Resident engineers.

Assistant engineers.

Contract work.

Inspectors.

Maintenance of structures.

Superintendent floating equipment.

Crews of floating equipment.

Fuel and water supply.

GAMBROA DIVISION—ORGANIZATION.

Division engineer.

Chief clerk.

General clerical force.

Timekeepers and pay rolls.

Material accounts.

Resident engineer.

Assistant engineers.

Contract work.

Inspectors.

Maintenance of structures.

Superintendent transportation.

Drivers and packers.

Boatmen.

Foremen road repairs.

DIVISION OF MUNICIPAL ENGINEERING—ORGANIZATION.

Division engineer.

Chief clerk.

General clerical force.

Timekeepers and pay rolls.

Material accounts.

Resident engineers.

Assistant engineers.

Inspectors.

Foremen.

MECHANICAL DIVISION—ORGANIZATION.

Superintendent of motive power and machinery.

Chief clerk.

General clerical force.

Timekeepers and pay rolls.

Material accounts.

Superintendent of motive power and machinery—Continued.

Mechanical engineer.
 Chief draftsman.
 Inspectors of material.
 Master mechanics.
 Superintendents of shops.
 Foremen roundhouses.
 Foremen car repairs.

DIVISION OF BUILDING CONSTRUCTION—ORGANIZATION.

Architect.
 Draftsmen.
 Estimators.
 Master builder.
 Chief clerk.
 General clerical force.
 Timekeepers and pay rolls.
 Material accounts.
 Superintendents.
 Foremen.
 Mechanics and laborers.
 Inspectors.

DIVISION OF METEOROLOGY AND RIVER HYDRAULICS—ORGANIZATION.

Division engineer.
 Chief clerk.
 General clerical work.
 Timekeeping.
 Assistant engineer.
 Draftsman.
 Levelmen.
 Hydrographers.

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EXHIBIT G.

GENERAL CONDITIONS OF EMPLOYMENT IN WHICH SALARY IS FIXED IN UNITED STATES CURRENCY.

[Service must be satisfactory to the head of department in which employed.]

The compensation of an employee at the rate specified in his provisional appointment will begin upon the date of embarkation at port of departure from the United States, but no payment on account thereof shall be made until after thirty days' service on the Isthmus. An employee appointed with rate of pay per hour will be paid, as above set forth, on a basis of an eight-hour day up to the time of his actually entering upon the performance of his duties on the Isthmus.

An employee will be granted free transportation from port of departure in the United States, which includes meals on the steamer, but will be required to pay all the expenses of the journey to such port, which are not to be refunded.

Members of the immediate family of an employee, upon request, when the exigencies of the steamship service permit, will be granted the Government rate of \$20 between New York and Colon. No charge will be made for children under 6 years of age, and half rates will be charged for children between the ages of 6 and 12 years. An employee will not be permitted to take his family to the Isthmus until he has first gone there and secured quarters for them.

The assignment to duty is vested in the head of the department in which employed, and an employee is expected to perform such duties as may be assigned to him by competent authority.

Where practicable and in the best interests of the service an employee will be provided with such quarters on the Isthmus as may be available from time to time, and if quarters are not available he will be granted, in lieu thereof, a sum, payable monthly, equal to 15 per cent of his monthly compensation; such monthly payment to an employee appointed with rate of pay per hour to be computed upon a basis of two hundred and eight hours per month.

In the event of illness an employee may be granted, upon the certificate of an authorized physician of the health department in the Canal Zone of his disability for work, sick leave with pay, in addition to such other leave of absence as may be granted to him, such sick leave with pay continuing during disability, not to exceed thirty days in any calendar year for an employee appointed in the United States whose salary is fixed on a monthly or annual basis, and not to exceed fifteen days in any calendar year for an employee appointed on the Isthmus whose salary is fixed in like manner. Such leave of absence on account of illness shall not be accumulative.

An employee appointed with rate of pay per hour is not entitled to leave of absence on account of illness, as herein provided.

An employee may be granted, in the discretion of the proper official of the Commission, such sick leave on account of injury incurred in the performance of duty, not exceeding thirty days in any calendar year, as may be necessary while such employee is incapacitated from duty by reason of such injury. The amount of compensation to be paid an employee to whom sick leave on account of injury is granted under these conditions will be calculated at the rate at which such employee is carried on the rolls of the Commission at the time of his injury; and in case of an employee appointed with rate of pay per hour, such calculation shall be based upon an eight-hour day. Such sick leave on account of injury as herein mentioned may be granted to an employee whose salary is fixed on an annual or monthly basis in addition to the sick leave above provided, in the discretion of the proper official of the Commission.

Free medical and hospital attendance in case of illness is provided, and free transportation to a port in the United States upon the termination, by or at the instance of the Commission, of satisfactory service, the character and length of such service to be determined by the head of the department in which employed.

An employee whose salary is fixed on an annual or monthly basis will receive no extra pay for overtime work required of him. Such employee may be granted, in the discretion of the head of the department in which employed, leave of absence at the rate of six weeks for each twelve months of service rendered by him, or at the rate of three and one-half days for each full month's service actually rendered by him, such leave to be accumulative for a period of two years, and may be granted at any time after eight months' service, in the discretion of the head of the department in which employed. If such leave be granted, an employee will be entitled to the Government rate of \$20 each way on the steamers of the Panama Railroad and Steamship Company, operating between New York and Colon. This grant of leave of absence is not to be considered a vested right, but is made to promote the welfare and interests of the service, and compensation for the period of leave will not be paid until after the employee returns to duty on the Isthmus.

An employee whose compensation while on duty carries with it subsistence will not be entitled to subsistence or commutation in lieu thereof while on leave of absence.

An employee whose compensation while on duty carries with it quarters will not be entitled to quarters or commutation in lieu thereof while on leave of absence from the Isthmus.

The compensation of an *employee appointed with rate of pay per hour*, after entering upon the performance of his duties, will be based upon an eight-hour day, with time and a half for overtime, including Sundays and holidays. Such employee will not be entitled to leave of absence with pay, except such sick leave on account of injury as may be granted to him as above provided.

EXHIBIT II.

REGULATIONS GOVERNING PURCHASE, DELIVERY, ETC., OF MATERIALS AND SUPPLIES.

ISTHMIAN CANAL COMMISSION,
Washington, D. C., August 1, 1905.

The following rules will govern the purchase, delivery, and issuing of, and the accounting for, material and supplies:

PURCHASES.

The general purchasing officer will purchase goods in accordance with the rules laid down by the Commission, and, so far as supplies for the Isthmus are concerned, no purchase will be made except on properly approved requisitions made by the chief of the division of material and supplies. Requisitions for supplies for use by the Commission in the United States will emanate from the office needing such supplies, and shall bear the signature of the proper official.

The general purchasing officer shall buy the quantities of articles as may be stipulated on the requisitions, following, as far as possible, the specifications and description given; and if the occasion requires the exercise of discretionary measures, will confer with proper official in relation thereto.

The general purchasing officer shall be charged with the issuing of necessary instructions to insure delivery in accordance with specifications and time requisitions, and shall keep a careful record of all requisitions and their disposition, of all contracts made and quantities supplied under said contracts, and all other information necessary for or pertinent to the duties of his office.

On receipt of requisitions, the same shall at once be given a number by the general purchasing officer, and date of receipt marked on same. Records shall be kept which shall also show the various progressive steps taken in each and every case before final shipment is effected.

In ordering goods or awarding contracts for Isthmus requirements on a f. o. b. United States ports basis, the general purchasing officer shall prepare seven copies of such orders, and they shall be disposed of simultaneously, as follows: First copy for sellers; second and third copies for general auditor; fourth copy for files of general purchasing officer; fifth copy for chief of division of material and supplies; sixth copy for forwarding agent at point where shipment has to be effected; seventh copy for inspecting engineer.

On ordering goods or awarding contracts for Isthmus supplies on a c. i. f. basis, the general purchasing officer shall prepare seven copies of such orders, and they shall be simultaneously disposed of as follows: First copy for sellers; second and third copies for gen-

eral auditor; fourth copy for files of general purchasing officer; fifth copy for chief of division of material and supplies; sixth copy for forwarding agent at point where shipment has to be effected; seventh copy for inspecting engineer.

On ordering goods or awarding contracts for supplies to be used in the United States office of the Commission, the general purchasing officer shall prepare five copies of such orders, and they shall be simultaneously disposed of as follows: First copy for sellers, second and third copies for general auditor, fourth copy for general purchasing officer, fifth copy for department where requisition originated.

Accompanying all orders, careful instructions will be sent by general purchasing officer to sellers for proper rendering of invoices, marking of packages, shipment of goods, and the preparation of shipping lists, and, as far as practicable, special forms shall be supplied for the making of invoices and shipping lists.

DELIVERY OF SUPPLIES.

All goods shipped to the Isthmus shall be marked I. C. C., with the port of destination and a number corresponding to that given on the original requisition by the material and supplies division and that given by the general purchasing officer.

In the event of supplies being purchased f. o. b. at United States ports, shippers will be instructed to furnish six copies each of shipping lists and invoices to forwarding agent at point where shipment is to be effected, who, on shipment being effected, will O. K. shipping lists, secure necessary bill of lading, and distribute documents, as follows: Two copies of shipping lists, invoices, and bills of lading to division of material and supplies at Isthmus; three copies of shipping lists and invoices to general purchasing officer, who will make record of same and transmit them to general auditor; one copy of invoice, shipping list, and bill of lading for files of forwarding agent.

Care will be taken that all documents accompany actual shipments.

In the event of supplies being purchased c. i. f. (Isthmus ports), shippers will be instructed to prepare, for the purpose of the Isthmian Canal Commission, bills of lading, shipping lists, and invoices in quadruplicate, and to forward same to division of material and supplies on Isthmus.

Shipper shall be advised that required documents must in every case accompany or anticipate shipments.

For supplies purchased for use in the United States office of the Isthmian Canal Commission, sellers will be instructed to forward invoices in quadruplicate with the goods, and, on careful inspection by a party deputed for that purpose by the general purchasing officer, and on being found in order, the original, duplicate, and triplicate invoices will be, after proper certification, forwarded to the general auditor.

Immediately on a charter party being made copy of same shall be forwarded to the chief of the division of material and supplies and to the general auditing division.

ASSISTANT PURCHASING AGENT ON ISTHMUS.

As the title indicates, this official shall be subordinate and subject to the orders of the general purchasing officer.

The same general rules that govern the general purchasing officer shall serve to guide the assistant purchasing agent on the Isthmus.

On purchasing supplies he shall instruct sellers to put such marks and numbers on their goods as may be necessary for identification purposes, and on receiving receipt from consignee shall prepare proper voucher, to which the receipt in question and other proper papers shall be attached, and such voucher shall be forwarded to local auditor through the chief of the division of material and supplies.

He shall also keep records which shall show all the operations in his office.

ASSISTANT PURCHASING AND FORWARDING AGENTS IN THE UNITED STATES.

As their titles indicate, these officials shall be subordinate and subject to the orders of the general purchasing officer.

They shall be charged with attending to the supervision of the filling of all orders sent them.

They shall compare marks and condition of all packages forwarded by them and shall carefully report to shippers, as well as to the general purchasing officer, any exceptions thereto.

Shippers of goods purchased on an f. o. b. basis shall be required to forward to the respective forwarding agents six copies each of the shipping lists and invoices. On shipments being effected the forwarding agents will O. K. shipping lists, secure necessary bills of lading, and distribute the documents as heretofore provided.

Each forwarding agent shall keep records which shall show all the operations of his office and of shipments made, so that any unexecuted orders can be seen at a glance and information readily given as to all operations.

If an assistant purchasing agent shall be intrusted with the purchase of supplies, he shall be guided by the same rules as govern the general purchasing officer.

CUSTODY AND ISSUE OF MATERIAL AND SUPPLIES.

The custody, transfer, and issue of all supplies, and the records of all property in store and unissued on the Isthmus of Panama belonging and pertaining to the Isthmian Canal Commission shall be under the supervision of the general purchasing officer. In the Canal Zone, Isthmus of Panama, there shall be an officer known as the chief of the division of material and supplies, who shall, under the direction of the general purchasing officer, have charge of all supplies and material and manufactured articles in store and unissued. His office shall be at Colon.

All supplies purchased with moneys appropriated for the construction of the isthmian canal shall be deemed to have been purchased for the Isthmian Canal Commission, and not for any department thereof, and these supplies, together with all supplies on hand, shall be arranged, classified, consolidated, and issued for consumption and use under such regulations as the chairman of the Isthmian Canal Commission may prescribe, without regard to the department for which purchased.

Medicines and articles of hospital equipage are exempt from this regulation.

Care must be exercised that supplies in store especially adapted to particular uses shall not be drawn indiscriminately nor used for work in which material of a lower grade and less value can be utilized with equal advantage.

Not more than a six months' supply of materials shall be carried.

All blank forms for use in accounting for material, and methods to be followed in respect thereto, both as regards office records and reports required by accounting division, shall be prescribed by the general auditor or local auditor, the local auditor or his representative to have access to all records of the division of material and supplies as occasion may require.

The chief of the division of material and supplies shall acknowledge to the general auditor the receipt of all goods and supplies received from without the Zone, and shall acknowledge the receipt of purchases within the Zone to the local auditor, and exceptions as to shortages and condition of materials shall be noted, in order to insure the proper auditing of the account.

The chief of the division of material and supplies shall not give a receipt for articles delivered into his custody by contractors until furnished with invoices in duplicate, which shall be complete descriptive lists of the articles claimed, one receipt to be signed and returned to the party delivering the articles, and the other to be retained.

No supplies delivered by contractors shall be received unless marked and distinguished with the name of the contractor furnishing the same.

All invoices of goods purchased for the material and supplies division shall be entered in prescribed records.

Stock cards shall be kept by the material and supplies division showing the amount of stock in each and every storehouse, and each storekeeper will keep stock cards showing all stock on hand in the warehouses over which he may have supervision.

The names and signatures of all officers and employees authorized to sign requisitions must be filed with all storekeepers, the chief of the division of material and supplies, and the local auditor, such signature to be verified by the head of the department authorizing the same.

Officers and employees making requisitions for material and supplies must, on receipt of same, check them carefully with the triplicate copy of requisitions in their possession, noting thereon, as well as on the receipt which they will be required to give, any exceptions thereto and the actual date of receipt.

The material and supplies delivered by the material and supplies division to other departments and bureaus on the Isthmus shall be covered by invoices and receipts in duplicate. The forms shall contain a statement of the articles delivered, the inventory cost, the percentage to cover cost of purchase, handling, and delivery, and the total amount with which the receiving department or bureau is chargeable. Such invoices or receipts shall be dated to show the respective dates of the invoice or receipt of the property. One copy shall be retained by the officer with whom the invoices or receipts are exchanged, and one copy of each sent to the auditor, with abstracts

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prepared at the close of each month, as a voucher for charging the receiving department or bureau, for the credit of the material and supplies division, and the account of the cost of purchase, handling, and delivery of supplies, respectively, in settlement of the account. The two invoices and two receipts will be prepared by the division of material and supplies, and the invoices will be signed by the chief of that division and transmitted to the auditor as aforesaid, together with the receipt for the property, which will be secured by the division of material and supplies from the receiving bureau.

REQUISITIONS MADE ON MATERIAL AND SUPPLIES DIVISION.

No material or supplies will be delivered except on properly approved requisitions.

All requisitions for material and supplies must be addressed to storekeepers on proper forms specially devised for the purpose, and must state thereon the exact use for which the requisitioned supplies are needed. Requisitions must be made in triplicate, signed by the maker thereof, and, before being forwarded to the storekeepers, must bear the signature of the proper officer. The original and duplicate requisitions will be forwarded to the storekeepers, while the triplicate will be retained, in file form, by the maker thereof. All requisitions will be numbered consecutively by the office originating same.

Stub requisitions shall be receipted by the person to whom the material is actually delivered, and be regarded as the itemized invoices covering the material delivered to the various departments or bureaus. There shall be compiled in the office of the chief of the division of material and supplies summaries in duplicate of stub requisitions and invoices, as follows:

Of stub requisitions, at the end of each month, a summary stating the total value of the material under each class issued during the month, as shown by the totals in "Record of stub requisitions by classes."

Of store invoices, at the end of each month, the value of stores issued under each class during the month, as shown by the totals in "Record of store invoices."

Separate summaries shall be made for each department concerned.

Stub requisitions and store invoices shall be carefully compiled by the heads of departments or divisions for the verification of summaries when received. Summaries shall be forwarded to the auditor with the monthly balance sheets as the vouchers of expenditures pertaining to stores covered by the summaries.

In case material is diverted from the use for which it was originally intended, as shown by requisition or invoice, which is the basis for charge to expenditures, notice must be given to the local auditor, giving full reference to original stub requisition or invoice showing for what use material was originally drawn and to what use it was finally put.

ARTICLES MANUFACTURED.

Invoices of articles manufactured by the various departments or divisions shall, so far as practicable, be condensed into one monthly invoice for each department or division. This practice shall not pre-

clude the rendering of a memorandum invoice with each delivery of manufactured articles to the storekeeper, which is necessary in order that he may be enabled to make immediate expenditure invoices, if required.

When manufactured articles are invoiced to storekeepers by means of memorandum invoices the total amounts under each class shall be covered at the end of each month by summary in duplicate. This summary of manufacturer's invoices shall be similar to the summary used by the chief of the division of material and supplies to cover issues to various departments.

All expenditures of supplies shall be at an average price, determined by dividing the total value of the supply on hand of any articles by the total quantity thereof, and a new price shall be established upon the receipt of an invoice of the article.

All articles manufactured in the various departments or divisions and approved by the head of the department or division to which they pertain shall be turned into the division of material and supplies for store.

Blanks, books, etc., made by the printing office and articles manufactured at shops will be handled on shop orders or requests for manufactured articles. Any balance in the account of various shops and printing office at close of the month will consist of material in the course of manufacture. A detail list of uncompleted orders, with cost thereof, will be furnished the local auditor monthly.

SCRAP MATERIAL.

Departments originating scrap material will turn it over to the material and supplies division at stated periods, accompanied by an invoice in duplicate, at prices to be fixed by the general purchasing officer, one copy of invoice, receipted by the chief of the material and supplies division, to be forwarded to auditor as basis for charge against the material and supplies division and credit to the department originating the scrap. Care should be taken to show on the invoice from what source scrap was received—that is, from locomotives, cars, track, etc.

Scrap metal used in foundry should be drawn from material and supplies division on stub requisition, as is other material, and the value of same included in cost of castings.

RECORD OF MATERIAL AND SUPPLIES.

Material and supplies received shall be entered in a "Record of material received," such record to show date of receipt, source of supply, and all details, including exceptions, if any.

Record of material received shall be checked against the invoices for such material. Any exceptions in respect to shortages, condition of material, etc., shown on the record to be noted on invoices, which shall have recorded thereon reference to the folio, together with the acceptance of the department receiving the material, and forwarded to the chief of the division of material and supplies.

On the delivery of supplies by storekeeper to a department's representative or to the railroad or other carrier for shipment a shipping receipt, specifying the number of packages, will be taken (in dupli-

ente), one copy to be mailed to the department or division ordering the material and one copy retained by the store furnishing the supplies, reference being made thereon to requisition covering.

Property delivered by one storekeeper to another storekeeper in the same department will be reported by the delivering and receiving storekeepers the same as property received from and delivered to other departments or divisions, except that invoices may omit values, and will be covered by shipping receipts. The chief of material and supplies division will keep proper record of such transfers, but will not certify the invoice and receipt to the auditing division.

In addition to the books of record, each class of material and supplies shall have especially prepared cards on which storekeepers shall record all receipts, deliveries, and corresponding stock on hand. The object of such cards is to show at a glance the quantity of any one article on hand at any one storehouse or deposit and to facilitate the checking of actual goods on hand by the inspectors who will be detailed for this duty.

Storekeepers will transmit to the chief of the material and supplies division daily requisitions filled by them, such requisitions to be listed on the form of transmittal bearing a stub receipt, which will be signed by the chief of the material and supplies division and returned to the storekeeper.

Debit entries for supplies received and credit entries for supplies delivered, as well as proper debit and credit entries for supplies transferred between stores, should be made daily on stock cards by the chief of material and supplies division as well as by storekeepers.

PROPERTY RECORDS.

Property books shall be kept by all departments and divisions, and therein shall be recorded all transactions relating to material and supplies. Suitable books of record to serve as checks shall be kept in the local auditor's office.

The chief of the division of material and supplies shall keep a record of requisitions received, requisitions executed, requisitions made on general purchasing officer or assistant purchasing agents, requisitions filled by general purchasing officer or assistant purchasing agents, material and supplies received, with values, material and supplies delivered, with values, material and supplies on hand, with values, thereby centralizing in his office all details in connection with the purchase, reception, and delivery of materials and supplies.

The division of material and supplies on the Isthmus shall afford every facility to the heads of departments or divisions for obtaining information and examining supplies on hand.

In accordance with resolution of the executive committee, material received from the New Panama Canal Company, until such time as a complete inventory may be made, will be taken into the accounts of the Isthmian Canal Commission only as used, at a price equal to 50 per cent of the cost of new material of the same quality, except that scrap metal shall be taken up as used at current prices of scrap metal, less cost of preparing it for use. Scrap metal sold to be taken up at sale price. Cost of new material and price of scrap material to be fixed by general purchasing officer. Inventories of materials other than French stock will be taken on September 1, 1905,

and in future at close of each fiscal year, June 30, and at such other periods as the general auditor may desire.

STOREKEEPERS.

Storekeepers will be subordinate and subject to the orders of the chief of the division of material and supplies, and shall be chargeable, through the account of the chief of the division of material and supplies, with all material and supplies in their possession or under their care.

Storekeepers shall be charged with the ordering, through the division of material and supplies, of supplies for stock purposes, reception and delivery of material and supplies in the storehouses of which they are in charge, and of keeping a careful record of all operations incidental to same.

If the storekeepers on whom requisitions are made do not have on hand the supplies called for, they will at once communicate with the chief of the division, who will inform them if any other storehouse on the Isthmus can fill the order. If, however, the goods called for are not on hand, but must be purchased, the requisitions will be forwarded by the storekeeper without delay to the chief of the division of material and supplies, who will advise the maker thereof the disposition of same.

If only a part of a requisition can be filled by a storekeeper, and the remainder has to be obtained from another store or purchased, the unfilled part of the requisition should be canceled on storehouse on which drawn, provided some other storehouse can fill the requisition; otherwise, requisition should be made on chief of division of material and supplies in the manner provided for in ordering stock supplies, and the requisition, held in the meantime, will be filled when the material is received.

Supplies received by storekeepers shall be accompanied by an invoice (in duplicate) prepared by direction of the proper official of the department or division making the delivery, and thereon shall be stated clearly the quantity, dimensions, and full description of the supplies delivered. After careful inspection and examination the storekeepers shall, in a space provided for this purpose, acknowledge upon the original and duplicate invoices the receipt of supplies thereon indicated and note carefully any exceptions thereto. The receipted original invoice shall be forwarded immediately to the chief of the division of material and supplies for proper disposition.

Storekeepers will be held strictly responsible for all material in their possession and charge, and shall take all precautions against damage of the stores under their charge by insects, dust, dampness, light, and all other causes of deterioration that can be guarded against. They shall promptly report any articles of stock missing or unaccounted for in any way.

On the first Wednesday of each quarter they shall submit a detailed list of all surplus, obsolete, or worthless articles in their stock, so that proper steps may be taken to dispose of the same.

INVENTORIES BY STOREKEEPERS.

When storekeepers are not otherwise employed they shall cause an inventory of their stock to be taken, this inventory to be taken by

classes. As the stock of each item is taken, the result shall be immediately compared with the stock tally card, and then, together with the stock tally cards, compared with the stock ledger accounts in the office of the chief of the division of material and supplies.

Discrepancies shall be carefully investigated by the chief of the division of material and supplies, and deficiencies which can not be reconciled reported for survey.

Under any circumstances the stock tally cards shall be corrected, if necessary, to conform to the actual balances on hand, and any differences charged to gain or loss by inventory, giving date.

The progress of this inventory will be necessarily slow, but it will be continuous, and the work should be done with great care in order to obtain absolute accuracy.

Special inventories shall be taken from time to time, as may be directed by the general auditor through the general purchasing officer.

REQUISITIONS FOR MATERIAL AND SUPPLIES TO BE PURCHASED.

For all material and supplies needed that are not obtainable under existing contracts requisitions shall be submitted to the general purchasing officer through the chief of the division of material and supplies, and shall be consecutively numbered, beginning a new series each fiscal year. All requisitions shall be strictly according to prescribed forms, and be complete in the following:

There shall be carefully followed the description and wording of the requisitions originating with departments and the specifications relating thereto. The department ordering the material will be held responsible for the correct description and specifications for material ordered.

A separate series of requisitions shall be issued by the material and supplies division for material ordered for the engineering and construction department and for the Canal Zone and sanitation department.

There must be stated the date by which the supplies must be delivered.

The arrangement of the articles on the requisition must be in accordance with the latest classification, specifying the items and grouping the items under their respective class and numbers.

There must be given such details and description or specifications of the articles required, and the test or requirements which they are to undergo, as will enable bidders and the general purchasing officer and the inspectors to understand readily what is required. Such descriptions must be made as broad as the necessities of the department will permit, in order to permit the fullest and freest competition consistent with these requirements, and special care must be taken to avoid so describing an article required as to limit it to any proprietary articles or to the products or manufacture of any particular individual or concern; the object being to place all individuals and concerns on an equal footing in making bids.

Reference to a catalogue shall not be made, nor shall the words "equal to" or any corresponding terms be used, except as provided in the following paragraph:

There shall not be a call for any proprietary articles where it can possibly be avoided, and when calling for proprietary articles requisitions must be accompanied by a statement from the head of the department requisitioning for the supplies that these articles and no other will answer the necessities of the service.

Requisitions shall state the estimated cost, giving unit price and total amounts.

There must be expressed the object for which the supplies are wanted.

Requisitions must bear the certificate of the chief of the division of material and supplies on the Isthmus that the articles are not in store and are not obtainable under existing contracts, and that they are absolutely needed.

When the chief of the division of material and supplies receives a requisition on which any of the items can be supplied from the articles in store or due under existing contracts by the time required, he shall immediately return it to the head of the department from which it emanated, with the request that these items be eliminated; and under no circumstances shall the chief of the division of material and supplies sign a requisition until satisfied that none of the items can be furnished from articles in store or due under existing contracts.

When a proper comprehension of requisitions necessitates sketches or drawings, they shall be appended to the requisition by the department requisitioning for the supplies.

The items on the requisition must be numbered in the left-hand margin consecutively, without regard to classes.

The division of material and supplies shall indicate in an appropriate place on the requisition the quantity of each item on hand at the time of making the requisition.

INSPECTION.

When supplies are received the chief of the division of material and supplies should immediately call for inspection of them.

For the inspection of supplies submitted for delivery there shall be at Cristobal and at Panama a board of two employees, assisted by a chemist.

At inspections by this board a member of the division of material and supplies shall be detailed as its representative, who shall give any information pertaining to the inspection in question that may be desired by the board, and shall bring to the attention of the board any particulars that may bear upon the protection of the public interests.

The board of inspection shall carefully inspect as to quality and quantity, and, when necessary, shall test the articles delivered under contract or under open purchase.

Calls for inspection shall be prepared in triplicate, in accordance with the prescribed form by the chief of the division of material and supplies. They shall embrace only articles on one contract or requisition.

Immediately after supplies received by purchase in the United States or on the Isthmus shall have been inspected, they shall be tagged or marked with the name of the department for which pur-

chased, number of contract or open-purchase requisition, number of inspection call, and date when passed or rejected.

After noting action on the call, the board of inspection shall return the original to the division of material and supplies; shall forward the duplicate to the local auditor, and shall forward weekly to the general purchasing officer the triplicate, accompanied by a summary signed by the senior member of the board, showing the number of the call, names of the contractors, numbers of the requisitions or contracts, and the department to which it pertains.

Articles manufactured in the various departments, and approved by the heads of the departments to which they pertain, shall not be inspected by the board of inspection, but shall be received in store after the invoices therefor have been verified.

The board of inspection shall keep a record of its work, showing dates of inspection, articles inspected, and acceptance or rejection, noting the cause, if the latter. The inspection must in all cases be thorough, and be made personally by the board.

BOARD OF SURVEY.

Survey of material and supplies in the custody of the chief of the division of material and supplies shall be made by board of survey created by resolution of executive committee, composed of three members, one each being appointed by the head of the department of administration, department of government and sanitation, and of the department of engineering and construction.

When articles are turned into store, or when articles in store are deteriorated from any cause, become obsolete, or are borne on the books without value or at a fictitious value, the chief of the division of material and supplies shall make request for survey, such request to be made on the prescribed form in triplicate. The surveying officers receiving the order to make the survey shall proceed to the place where the articles are held in store and make a thorough inspection of each article, and shall write in the appropriate space in the survey report their recommendations in each case.

In the event of any property after use being returned to the material and supplies division, it shall be first valued by the board of survey, and then received by the material and supplies division at said valuation, who shall make out credit notes for same, forwarding copy of said credit note and of valuation to the local auditor at the end of each month, with accompanying abstract.

The items on the survey request shall be numbered consecutively by the chief of the division of material and supplies.

Reports of survey shall be made in triplicate, one copy to be forwarded direct to the local auditor, one copy to be forwarded to the chief of the division of material and supplies, and the third copy to be retained for reference by the board.

The chief of the division of material and supplies, on receiving an accomplished report of survey, shall immediately cause the articles to be treated as indicated in the report.

In cases where articles are recommended to be repaired, no expenditures for such repairs shall be made until authorized by the head of the department to which they pertain.

The recommendations of the board of survey shall not become operative until approved by the head of the department to which the supplies pertain.

When articles are lost or missing, or do not correspond in kind or quantity to the marks on the package, the chief of the division of material and supplies shall request, on the prescribed form, in triplicate, an investigation by the board of survey, and such a board shall be ordered as outlined above. The report of the board shall be exhaustive, and shall be definite, when possible, as to the responsibility for loss or deficiency.

Should the chief of the division of material and supplies receive any shipment in which there is a shortage, he shall take up the invoices in full, expending the missing articles according to the direction of the survey report.

SALES.

Inspection, condemnation, appraisal, and public sale are necessary to a valid sale of unsuitable supplies. No such article shall be sold unless its sale has been specifically authorized by the chairman of the Commission.

It shall be the duty of the chief of the division of material and supplies to store and arrange articles condemned for sale in suitable lots, and, when occasion requires, present to the general purchasing officer a schedule of such lots, together with report of the board of survey as to the survey and final condemnation and appraisal of such material.

All material and equipment in the hands of the material and supplies division, including sanitary department, sold to outside parties, including the Panama Railroad, should be covered by a sale order on blanks prescribed by the auditor, one copy of sale order to be forwarded to the auditor on date of issue. Reference to sale order to be given in bill Form A-20.

EXHIBIT I.

FORM OF PROPOSAL FOR BIDS.

OFFICE ISTHMIAN CANAL COMMISSION,
Washington, D. C., ———, ———.

Sealed proposals, in triplicate, will be received at the office of the general purchasing officer, Isthmian Canal Commission, Washington, D. C., until 10.30 a. m., ———, at which time they will be opened in public, for furnishing the above-mentioned articles. Blanks and full information may be obtained from this office or the offices of the assistant purchasing agents, 24 State street, New York City; custom-house, New Orleans, La.; 36 New Montgomery street, San Francisco, Cal., and 410 Chamber of Commerce building, Tacoma, Wash.; also from chief quartermaster, Department of the Lakes, Chicago, and Commercial Club, Mobile, Ala.— ———, general purchasing officer.

POSTER—CIRCULAR.

[Advertisement.]

ISTHMIAN CANAL COMMISSION,
OFFICE OF GENERAL PURCHASING OFFICER,
Washington, D. C., ———, ———.

* * * * *

[List of articles.]

Sealed proposals, in triplicate, will be received at the office of the general purchasing officer, Isthmian Canal Commission, Washington, D. C., until 10.30 o'clock a. m. on the — day of —, at which time they will be opened in public, for furnishing the articles hereinafter specified.

Bids received *after* the hour of the date above specified will *not* be considered and will be returned unopened.

Each proposal, *where the total amount of the bid exceeds five hundred dollars (\$500)*, must be accompanied by a proper guaranty, which must be prepared on one of the two forms hereto attached, either by a surety company or individual guarantors, as bidders may elect.

Each individual guarantor will be required to justify in a sum equal to not less than twenty per centum of the value of the work or material covered by the proposal which he guarantees.

If bidders prefer to execute and file an annual guaranty to cover their bids, proper blank forms will be sent them upon receipt by this office of application therefor.

All articles to be delivered *c. i. f.* on dock (by steamer) at either Colon (Atlantic port) or La Boca (Pacific port), Isthmus of Panama; and it is to be understood that the prices bid cover delivery on the dock, free of any cost or charge beyond the prices named in the bid or proposal.

Preliminary inspection will be made at the point of manufacture or purchase to determine whether material meets the requirements set forth in the specifications, and final inspection will be made on the Isthmus after delivery, as above.

Bidders must state where they propose to make delivery, the time when they propose to commence delivery, and within what time they will complete same after receipt of notice of award in each class scheduled and bid upon, and the general purchasing officer reserves the right, before making award, of fixing a penalty per day, at a reasonable percentage of the total value of the work or material involved, for delinquency on the part of the contractor in performance of agreement.

The Commission reserves the right to increase or reduce the quantities specified, at any time before shipment, not to exceed twenty (20) per centum thereof.

Proposals must be signed by the bidder and placed in a sealed envelope marked "Proposal for _____, to be opened on the _____ day of _____, _____," and addressed to the general purchasing officer, Isthmian Canal Commission, Washington, D. C.

Blanks and full information may be obtained from this office or the offices of the assistant purchasing agents, 24 State street, New York City; custom-house, New Orleans, La.; 36 New Montgomery street, San Francisco, Cal., and 410 Chamber of Commerce building, Tacoma, Wash.; also from chief quartermaster, U. S. Army, Department of the Lakes, Chicago, and the Commercial Club, Mobile, Ala.

It is to be understood that where articles are called for by weight bidders are to state the prices per *net* weight, and that the prices so bid are to cover the cost of packages, barrels, kegs, etc.

All correspondence relating to this poster circular should refer to serial No. —.

Bidders are reminded that postage in full must be prepaid on mailing bids to this office.

The Commission reserves the right to reject any or all bids and to accept any bid in the aggregate, or parts of same, as may be deemed most advantageous.

General Purchasing Officer, Washington, D. C.

Zone req. Nos. _____.

* * * * *

[Here follows detailed schedule of articles for which proposals are to be made.]

PROPOSAL FOR _____.

(Place) _____

(Date) _____, 190—.

To the General Purchasing Officer, Isthmian Canal Commission,
Washington, D. C.

Sir: In accordance with your advertisement and specifications dated _____, 190—, inviting proposals for _____ and subject to all the conditions and requirements thereof, copies of which are hereto attached, and, so far as they

relate to this proposal, are made a part of it, [I or we] propose to furnish and deliver * [see note below] — the articles specified in the foregoing "schedule" at the price set opposite each.

[I or we] make this proposal with a full knowledge of the kind, quantity, and quality of the articles required, and should [I or we] receive written notice of the acceptance of all, or any part, thereof [I or we] will furnish the articles specified at the prices and at the place and in the manner and within the time indicated in this proposal; and will, if required by the Isthmian Canal Commission, by its proper officer, enter into formal contract within the time indicated in this proposal and the instructions contained hereon, with good and sufficient sureties, to be approved by the Isthmian Canal Commission, for the faithful performance thereof. If no formal contract is required, the attached bond shall be effective as a guaranty for the faithful execution of any orders placed with [me or us] under this proposal.

(Signature) _____
 (Street and number) _____
 (Post-office) _____
 (State and county) _____

If incorporated, give State of Incorporation.

BOND ON PROPOSALS.

Know all men by these presents that we ———, as principal, and [name of surety company], a corporation existing under the laws of the State of ———, as surety, are held and firmly bound unto the United States of America in the penal sum of ——— [20 per cent of the aggregate amount bid] dollars (\$———), for which payment, well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Given under our hands and seals this — day of ———, 19—.

CONDITIONS.

The conditions of the above obligation are such that any proposals or awards issued or orders given by the Isthmian Canal Commission to ———, the above bounden principal, for furnishing any supplies, commodities, or service to the Isthmian Canal Commission shall be accepted by said principal within ninety (90) days after the opening of said proposal, and any order given, if accepted, shall be carried out in accordance with its terms, and the said principals, and each of them, shall enter into a contract or contracts, as required by said Isthmian Canal Commission, with the proper officer of the United States, within the time and in accordance with the terms of said proposals, orders, and acceptances, as finally designated by said Commission, for the delivery of the accepted items, or the performance of said services, and will give bond, with good and sufficient sureties to be approved by the Isthmian Canal Commission, for the faithful and proper fulfillment of such contracts. And the undersigned bind themselves, their heirs, executors, administrators, and successors, to pay to the United States, in case the said bidders ——— shall fail to enter into such contracts and furnish such bonds within thirty (30) days after said notices of acceptance, or shall fail to make deliveries according to the terms of said accepted orders, in each such case the amount to be recovered hereunder shall be the difference in money between the amounts of the proposals of said bidders for the articles and services so accepted and the amounts for which the proper officer of the United States may procure the same from other parties, if the latter amounts be in excess of the former, and also each and every item of expenditure made on behalf of the United States as a consequence of such failure.

In witness whereof the principal hereto has set — hand and seal on this — day of ———, 19—, to this, and to two duplicate instruments of identical tenor and effect, and the surety hereon has caused the same to be

* Bidders should insert here the place where delivery is proposed to be made. All deliveries must be made *on dock* or *in warehouse* at point of delivery, as the Commission shall direct in each case.

executed by its proper officer thereto duly authorized under a _____ of its _____ passed on the _____ day of _____, 190—, a copy of which is hereto attached.

In presence of:

_____	as to _____	[L. S.] *
_____	Principal.	[L. S.] *
_____	as to _____	[L. S.] *
_____	Principal.	[L. S.] *
_____	as to _____	[L. S.] *
_____	Principal.	[L. S.] *
_____	as to _____	[L. S.] *
_____	Principal.	[L. S.] *
	By _____	
	as its _____	

Attest: _____

as its _____

[SEAL.] *

BOND ON PROPOSALS.

Know all men by these presents that we,^a _____, as principal, and _____, of _____, in the county of _____, and State of _____, and _____, of _____, in the county of _____, and State of _____, as sureties, are held and firmly bound unto the United States of America in the penal sum of _____ [20 per cent of the aggregate amount bid] dollars (\$_____), to the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Given under our hands and seals this _____ day of _____, nineteen hundred _____.

CONDITIONS.

The conditions of the above obligation are such that any proposals or awards issued or orders given by the Isthmian Canal Commission to _____, the above bounden principals, for furnishing any supplies, commodities, or service to the Isthmian Canal Commission shall be accepted by said principals within ninety (90) days after the opening of said proposal, and any order given, if accepted, shall be carried out in accordance with its terms, and the said principals, and each of them, shall enter into a contract or contracts, as required by said Isthmian Canal Commission, with the proper officer of the United States, within the time and in accordance with the terms of said proposals, orders, and acceptances, as finally designated by said Commission, for the

^a If the principal is a partnership, the individual names of the partners will be given with the recital that they are partners composing a firm, naming it, and the bond must be executed by all the partners.

^b President or other officer authorized to sign for the principal. A copy of the record of the selection of the officer or officers executing the bond for the principal, certified by the custodian of such records, under the corporate seal, to be a true copy, *must* accompany or be attached to the bond, unless the resolution authorizing its execution gives the names of the officer or officers, in which case no other evidence of their official character is required.

^c Board of directors or other governing body of the principal. A copy of the by-law or of the record of proceedings of the governing body of the corporation showing the authority of the officer or officers executing the bond for the principal *must* accompany or be attached to the bond, the same to be certified by the custodian of such records, under the corporate seal, to be a true copy. If the authority was given by resolution, enough of the records will be copied along with the resolution to show that it was adopted, and the entire matter copied (not simply the resolution) will be certified to be a true copy. If the authority is a by-law, the wording of the executing clause will be altered accordingly.

^d Here affix the corporate seal.

^e Here affix an adhesive seal.

delivery of the accepted items, or the performance of said services, and will give bond with good and sufficient sureties, to be approved by the Isthmian Canal Commission, for the faithful and proper fulfillment of such contracts.

And the undersigned bind themselves, their heirs, executors, and administrators, to pay to the United States, in case the said bidders ——— shall fail to enter into such contracts and furnish such bonds within thirty (30) days after said notices of acceptance, or shall fail to make deliveries according to the terms of said accepted orders, in each such case the amount to be recovered hereunder shall be the difference in money between the amounts of the proposals of said bidder, for the articles and services so accepted, and the amounts for which the proper officer of the United States may procure the same from other parties, if the latter amounts be in excess of the former; and also each and every item of expenditure made on behalf of the United States as a consequence of such failure.

In witness whereof the parties hereto and each of them have hereunto set their hands and seals to this, and to two duplicate instruments of identical tenor and effect, the day and year last above written.

In presence of:

_____	as to _____	[L. S.]
	As principal.	
_____	as to _____	[L. S.]
	As principal.	
_____	as to _____	[L. S.]
	As principal.	
_____	as to _____	[L. S.]
	As principal.	
_____	as to _____	[L. S.]
	As principal.	
_____	as to _____	[L. S.]
	and _____	
_____	as to _____	[L. S.]
	As sureties.	

STATE OF _____, County of _____, ss:

I, [name of first surety], one of the sureties named in the within bond, do swear (or affirm) that I am pecuniarily worth the sum of _____ dollars (\$_____) over and above all my debts and liabilities.

(Signature first surety.)

Subscribed and sworn to before me this _____ day of _____, 190-, at _____.

_____,
_____,
_____,

STATE OF _____, County of _____, ss:

I, [name of second surety], one of the sureties named in the within bond, do swear (or affirm) that I am pecuniarily worth the sum of _____ dollars (\$_____) over and above all my debts and liabilities.

(Signature second surety.)

Subscribed and sworn to before me this _____ day of _____, 190-, at _____.

_____,
_____,
_____,

I, _____, do hereby certify that [name of first surety] and [name of second surety], the sureties above named, _____ personally known to me, and that, to the best of my knowledge and belief, _____ is pecuniarily worth over and above all debts and liabilities, the sum stated in the foregoing affidavit of justification subscribed by him.

Dated _____, 190-.

I, _____, do hereby certify that _____, the surety above named, is personally known to me, and that, to the best of my knowledge and belief, _____ is pecuniarily worth, over and above all debts and liabilities, the sum stated in the foregoing affidavit of justification subscribed by him.

Dated _____, 190-.

GENERAL INSTRUCTIONS TO BIDDERS.

[May be applicable in part only to this call for proposals.]

1. Information in regard to supplies or services for which proposals have been invited will be furnished on application to all persons desiring it, but no person belonging to or employed in the service of the Isthmian Canal Commission will render assistance in the preparation of proposals.

2. Bidders for supplies will be informed of the kind, quantity, and quality of articles required, the place, time, and rate of delivery, and conditions of payment. They will be furnished with such specifications as have been adopted, and will be permitted to examine the standard samples at the places where deposited.

3. Bidders for labor will be informed of the nature and extent of the services required, where they are to be performed, and the time allowed for performance. They will be furnished with, or allowed to examine, plans and specifications of all works upon which they desire to bid, and in general will be furnished with any information needed to enable them to act understandingly.

4. No person will be informed, directly or indirectly, of the name of anyone intending to bid or not to bid, or to whom information in respect to proposals has been given.

5. Proposals should be prepared in triplicate, in strict accordance with the requirements of the advertisement or specifications. They should make specific reference to the advertisement and to any plans or specifications which may have been furnished. Each proposal should give the place of residence and post-office address of the bidder, with county, State, or Territory, and should be signed by the bidder with his usual signature in full.

6. A proposal by a person who affixes to his signature the word "president," "secretary," "agent," or other designation, without disclosing his principal, is the proposal of the individual. Proposals by a corporation should be signed with the name of the corporation, followed by the signature of the president, secretary, or other person authorized to bind it in the matter, who should file evidence of his authority to do so. Proposals by a firm should be signed with the firm name by one of the members of the firm. If the signature to a proposal is that of an officer, attorney, or agent of the corporation, or of an attorney or agent of a firm or individual, and his authority to act on behalf of his principal is not a matter of general notoriety in the locality where the proposals are opened, the officer or agent who opens such proposals should, before considering the same, satisfy himself that the signer is vested with sufficient authority to represent his principal in the transaction.

7. In proposals, numbers and prices will be written in words, as well as expressed in figures; but when a great variety of articles, such as stationery, hardware, etc., is required, quantities and prices may, if the amounts involved are inconsiderable and the forms of proposals so indicate, be expressed in figures only. It will be sufficient if specifications are referred to and are declared to form part of the proposal.

* If the principal is a partnership, the individual names of the partners will be given with the recital that they are partners composing a firm, naming it, and the bond must be executed by all the partners.

* Affix adhesive seal.

* The oath to be taken before a notary public or some other officer having general authority to administer oaths. If the officer has an official seal it must be affixed, otherwise the proper certificate as to his official character must be furnished.

* This certificate to be by a judge or clerk of a United States court, a United States district attorney, United States commissioner, or a judge or clerk of a State court of record with the seal of said court attached. If the official can make the certificate as to both sureties, it will not be necessary to fill out the form next below.

* He, she, or each.

8. Erasures or interlineations should be explained by the bidder in the proposal, over his signature.

9. Guaranties, signed by two responsible parties or by a qualified surety company, will be required to accompany proposals whenever, in the opinion of the officer or agent authorized to make the contract, they are necessary to protect the public interests, and when so required no proposal unaccompanied by a guaranty, made in manner and form as directed in the advertisement or specifications, will be considered.

10. The guaranty will be in duplicate, or in triplicate if required, and will be made out and executed with the necessary justification in accordance with blank forms furnished.

11. The guarantors, if individuals, must each justify in the amount indicated by the advertisement or circular of instructions to bidders.

12. A company duly incorporated under the laws of the United States or of any State, and legally authorized to guarantee bonds, and which has qualified before the proper Department, may be accepted as guarantor to proposals. The affidavit of justification and certificate of sufficiency in the form required for individuals may be omitted by corporate guarantors.

13. A firm, as such, will not be accepted as guarantor, nor a partner for a copartner or for a firm of which he is a member, nor a person who is a contractor with the Government or a bidder for supplies or services. Stockholders who are not directors or other officers of a corporation may be accepted as guarantors for such corporation.

14. When no guaranty is required, bidders must, if called upon by the awarding officer or agent, furnish satisfactory evidence before the award is made of their ability to carry their proposals into effect.

15. Proposals, with their guaranties, will be securely sealed in suitable envelopes, indorsed and addressed as required by the advertisement, and must be in the possession of the officer or agent addressed before the hour appointed for the opening. No responsibility will attach to an officer or agent for the premature opening of any proposal not so indorsed as to clearly show its character.

16. When an advertisement calls for proposals to furnish labor or supplies at more than one place, a separate proposal will be made for performance at each place, but all may be submitted in the same envelope.

17. Proposals received prior to the time of opening will be securely kept. The officer or agent whose duty it is to open them will decide when that time has arrived, and no proposal received thereafter will be considered.

18. Before the time for opening, any bidder may, without prejudice, withdraw from competition by giving written notice of his decision to the officer holding his bid, and when his bid is reached at the opening it will be returned to him or his authorized agent unread.

19. Telegraphic bids will not be considered.

20. The schedule and specifications must not be altered or interlined; any explanations that bidders deem necessary to submit should be typewritten and pasted in connection with the class to which such explanation refers, but any modification of any of the conditions or requirements will be at the risk of rendering the proposal informal, at the option of the Commission.

21. Samples, cuts, drawings, or blueprints are to be submitted only when specially called for.

22. The unit price must be written in ink.

23. Tie bids, all other things being equal, will be decided by lot.

24. Bids will not be considered for any other quantity or description of supplies than specified, nor for separate items of a class unless there should be no satisfactory bids received for the class as a whole, or the Commission should deem it to the Government's interest to make a modification.

25. The right is reserved to reject any bid for cause or to reject all bids if deemed for the interests of the Government, to strike out any item or items in the specifications after notice of intention, and to waive any defect or irregularity not a requirement of law.

26. If more than one bid be offered by any one party, by or in the name of his or their clerk, partner, or other person, all such bids may be rejected.

27. A bidder shall not be interested in more than one bid on the same class.

28. No bids having nominal or fictitious prices shall be considered.

29. Prices bid on all articles or items must be at a fair market value, otherwise the Commission shall be at liberty to reject bids or eliminate items on which prices quoted are either above or below market value.

30. No bid will be considered unless from a manufacturer of, or a dealer in, the article offered.

31. The Commission will not permit changes in or withdrawal of proposals after they have been publicly opened and recorded; nor can it assume the responsibility of making alterations, changes, or corrections in proposals at the request of bidders, whether such requests are received before or after the bids are opened.

32. Neither the laws nor the regulations make any allowance for errors, either of omission or commission, on the part of bidders. It must be assumed that bidders have fully informed themselves as to all conditions, requirements, and specifications before submitting proposals, and they can not be excused or relieved from the responsibility assumed by their proposal on the plea of error.

33. Proposals will be opened and read aloud at the time and place appointed for the opening (bidders having the right to be present).

34. The Government reserves the right to reject or accept any or all bids, or any part thereof.

35. Bidders to whom award is made may be required to enter into a written contract, with good and approved security, in an amount of not less than twenty (20) per centum of the total amount of such award, within thirty (30) days after being notified of the acceptance of the proposals. The contracts which the bidders and guarantors promise to enter into shall be, in their general provisions, in the form adopted by the Isthmian Canal Commission, blank forms of which can be inspected at this office. Parties making bids are to be understood as accepting the terms and conditions contained in such form of contract.

36. Transfers of contracts, or of interest in contracts, are prohibited by law.

EXHIBIT J.

AUDITING ORGANIZATION.

OFFICE OF THE ISTHMIAN CANAL COMMISSION,
Washington, May 16, 1905.

The following extracts from the minutes of May 8 and 16, 1905, are published for the information and guidance of all concerned:

AUDITING ORGANIZATION OF THE ISTHMIAN CANAL, CANAL ZONE, AND PANAMA RAILROAD.

The accounts of the Isthmian Canal Commission, government of the Canal Zone, and Panama Railroad Company will be in charge of a general auditor, located at Washington, who will have full control and full authority in respect to the methods and system of accounts to be followed and whose jurisdiction shall be exclusive and shall extend over all departments so far as relates to the accounts of the above organizations.

There shall be the following additional accounting officers: A chief deputy to the general auditor, in charge of the auditing office at Washington, representing the general auditor as occasion may require and performing such general duties as the general auditor may prescribe.

A local auditor, in charge of the accounts of the Panama Railroad, located at New York.

A local auditor, in charge of the accounts of the Panama Railroad, located on the Isthmus, who shall report to the local auditor in New York. The accounts audited on the Isthmus will be taken up on the books of the New York office.

A local auditor, in charge of the accounts of the Isthmian Canal Commission and the accounts of the government of the Canal Zone, located on the Isthmus of Panama.

The accounts audited on the Isthmus for the Isthmian Canal Commission will be forwarded to the Washington office of the general auditor for incorporation in the reports and exhibits covering the construction of the canal.

The local auditors in charge of the accounts of the Panama Railroad and the local auditor of the Isthmian Canal Commission and government of Canal Zone are subject to the jurisdiction and instructions of the general auditor in all matters pertaining to the duties of their offices.

Original record of accounts of the government of the Canal Zone will be kept on the Isthmus, and duplicate records of all transactions in relation thereto will be kept in the office of the general auditor at Washington.

All accounts of the Isthmian Canal Commission, whether audited in Washington or on the Isthmus, will be sent to the Treasury Department through the Washington office. Necessary duplicates will be retained in the office of the general auditor.

A comprehensive system of bookkeeping and accounting methods in line with existing laws will be adopted for the construction of the isthmian canal.

An accounting system for the government of the Canal Zone will be provided, fashioned after that of the government of the Philippine Islands so far as practicable.

BUREAU OF MATERIAL AND SUPPLIES.

There shall be a chief of bureau in charge of the handling and disbursing of all material and supplies for the construction of the isthmian canal and for the sanitation and government of the Canal Zone.

The bureau of material and supplies to be under the jurisdiction of the head of the department of construction and engineering. There shall be a separate storekeeper in charge of the handling and disbursing of supplies for the department of government and sanitation, who shall be appointed upon the recommendation of the head of that department.

The bureau of material and supplies and all storekeepers will be subject to the control and instructions of the general auditor in respect to the proper accounting for material and supplies.

TIMEKEEPING BUREAU.

Timekeeping bureaus will be organized on the Isthmus, under the jurisdiction of the chief engineer, covering labor employed in the construction of the isthmian canal, and under the governor of the Canal Zone covering labor employed for sanitation and government of the Canal Zone. Rules and regulations for the proper keeping of time of employees will be prescribed and enforced by the general auditor.

DUPLICATE ACCOUNTS.

Vouchers, pay rolls, and accounts current covering all transactions of the Isthmian Canal Commission and the government of the Canal Zone shall be taken, when practicable, in sufficient numbers to afford a complete file of original papers for the general auditor at Washington, and another for the local auditor on the Canal Zone, in addition to the copies required by the Auditor for the War Department and those demanded by the disbursing officer for his files. The general auditor is authorized to exercise reasonable discretion in regard to securing original papers for these purposes. Whenever, in the opinion of the general auditor, it is impracticable or inexpedient to obtain all papers in quadruplicate, he is authorized to substitute therefor other copies, properly authenticated, including certified abstract and impression copies of abstracts and vouchers.

The general auditor's office at Washington and the office of the local auditor on the Canal Zone shall be prepared at all times to furnish, on authorized request, complete data concerning the fiscal affairs under the control of the Isthmian Canal Commission, and to this end each office shall be provided with properly authenticated abstracts and vouchers, as provided in the preceding section, covering all settlements made by the other office, and shall retain permanently in its files full and exact copies of all settlements made within these respective offices.

THEODORE P. SHONTS,
Chairman Isthmian Canal Commission.

DETAIL

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Reference to a catalogue shall not be made, nor shall the words "equal to" or any corresponding terms be used, except as provided in the following paragraph:

EXHIBIT K.

DETAILED STATEMENT OF EXPENDITURES TO JUNE 30, 1905, BY DEPARTMENTS.

GENERAL AND DEPARTMENT OF ADMINISTRATION.

	To April 1.	April 3 to June 30	Total.
GENERAL.			
The Isthmian Canal Commission:			
Salaries of Commissioners.....	\$75,520.28	\$8,400.01	\$83,920.29
Per diem and traveling expenses.....	16,725.93	109.65	16,835.58
Transportation of employees to and from Isthmus.....	11,120.17	12,832.83	23,953.00
Contingent expenses.....	7,129.74	5,875.96	13,005.70
Office of committee on engineering:			
Salaries and wages.....	3,597.65	2,050.18	5,647.83
Contingent expenses.....	135.84		135.84
Special Commissioners:			
Salaries and wages, Commissioners.....	310.00		310.00
Per diem and traveling expenses.....	8,043.07	1,986.29	10,029.36
Contingent expenses.....	1.06	.60	4.66
Expenses under section 291, Revised Statutes, in connection with treaty.....	3,985.00		3,985.00
DEPARTMENT OF ADMINISTRATION.			
The chairman:			
Salaries and wages.....		5,500.00	5,500.00
Office of administration:			
Salaries and wages.....	23,083.33	11,094.32	40,177.65
Per diem and traveling expenses.....	1,491.14	82.60	1,573.74
Contingent expenses.....	17,480.36	3,226.97	20,707.33
The general auditor, Washington office:			
Salaries and wages.....	11,572.51	7,353.33	18,925.84
Per diem and traveling expenses.....	225.23	11.25	236.48
Contingent expenses.....	241.84	2.05	243.89
The general auditor, Isthmus office:			
Salaries and wages.....	1,689.86	3,594.68	5,284.54
Per diem and traveling expenses.....	3.25	28.65	31.90
Contingent expenses.....	2.19	12.70	14.89
Disbursing officers, Washington office:			
Salaries and wages.....	6,313.91	2,210.42	8,524.33
Per diem and traveling expenses.....	64.10		64.10
Contingent expenses.....	125.85		125.85
Disbursing officers, Isthmus office:			
Salaries and wages.....	11,840.66	4,595.08	16,435.74
Per diem and traveling expenses.....	394.85	97.03	491.88
Contingent expenses.....	658.75	820.00	1,478.75
The land department:			
Salaries and wages.....	5,089.73		5,089.73
Contingent expenses.....	10.87		10.87
<i>Material and supplies.</i>			
Purchased in United States.....	716,525.43	118,191.32	834,716.75
Purchased on Isthmus.....	169,359.49	83,321.40	252,680.89
Manufactured on Isthmus.....	11,176.57		11,176.57
<i>Cost of purchase, handling, and transportation of material and supplies.</i>			
The general purchasing officer, Washington office:			
Salaries and wages.....	1,863.24	8,853.21	10,716.45
Per diem and traveling expenses.....	121.05	183.05	304.10
Services of inspectors.....	1,864.70	1,033.82	2,898.52
Per diem and traveling expenses of inspectors.....	29.50		29.50
Contingent expenses.....	1,766.26	1,766.02	3,532.28

tion.
Immediately after supplies received by purchase in the United States or on the Isthmus shall have been inspected, they shall be tagged or marked with the name of the department for which pur-

Expenditures to June 30, 1905—Continued.

GENERAL, AND DEPARTMENT OF ADMINISTRATION—Continued.

	To April 1.	April 3 to June 30.	Total.
<i>Cost of purchase, handling, and transportation of material and supplies—Continued.</i>			
Assistant purchasing and shipping agents, New York office:			
Salaries and wages.....	\$2,030.03	\$1,884.51	\$3,914.54
Per diem and traveling expenses.....	276.00	8.50	284.50
Contingent expenses.....	650.18	82.26	732.44
Assistant purchasing and shipping agents, New Orleans office:			
Salaries and wages.....		650.00	650.00
Contingent expenses.....	28.40	16.95	45.35
Material and supplies division on Isthmus:			
Salaries and wages.....	116,642.07	88,728.42	205,370.49
Per diem and traveling expenses.....	512.35	29.15	541.50
Contingent expenses.....	810.99	27.73	838.72
Freight, advertising, etc.....	18,966.32	2,072.33	21,038.65
<i>Purchase of furniture, equipment, and instruments.</i>			
Isthmian Canal Commission.....	21.36	300.59	321.95
Office of administration.....	4,354.57	831.07	5,185.64
General auditor, Washington office.....	279.51	132.39	411.90
General auditor, Isthmus office.....		7.00	7.00
Disbursing officers, Washington office.....	255.00	43.96	303.96
Committee on engineering.....	111.61		111.61
The general purchasing office.....	861.55	547.44	1,408.99
Assistant purchasing and shipping agents:			
New York office.....	199.91	266.69	466.60
New Orleans office.....	55.00	202.30	257.30
Miscellaneous.....	2,162.29		2,162.29
<i>Purchase of land and buildings.</i>			
J. Vasquez and Santa Rosa estates.....	41,790.00		41,790.00
One-half of Tivoli estate.....		4,500.00	4,500.00
Purchase of Panama R. R. stock.....	155,657.49		155,657.49
Construction and repair of buildings.....	51,812.68	10,282.75	62,095.43
SUMMARY.			
General:			
The Isthmian Canal Commission.....	110,496.12	27,218.45	137,714.57
Office of committee on engineering.....	3,733.49	2,050.18	5,783.67
Special Commissioners.....	12,342.13	1,986.89	14,329.02
Department of administration:			
Office of administration.....	48,057.83	19,903.89	67,961.72
The general auditor, Washington office.....	12,039.58	7,366.63	19,406.21
The general auditor, Isthmus office.....	1,696.30	3,636.03	5,331.33
Disbursing officers, Washington office.....	6,503.86	2,210.42	8,714.28
Disbursing officer, Isthmus office.....	12,894.26	5,512.11	18,406.37
The land department.....	5,100.60		5,100.60
Material and supplies purchased.....	897,061.49	151,512.72	1,048,574.21
Cost of purchase, handling, and transportation of material and supplies.....	145,561.09	105,325.95	250,887.04
Purchase of furniture, equipment, and instruments.....	8,300.80	2,336.44	10,637.24
Purchase of land and buildings.....	41,790.00	4,500.00	46,290.00
Purchase of Panama R. R. stock.....	155,657.49		155,657.49
Construction and repair of buildings.....	51,812.68	10,282.75	62,095.43
Total disbursements, first department.....	1,513,046.72	343,842.46	1,856,889.18

DEPARTMENT OF GOVERNMENT AND SANITATION.

	To April 1.	April 3 to June 30.	Total.
The executive office:			
Salaries and wages.....	\$15,927.13	\$10,701.59	\$26,628.72
Per diem and traveling expenses.....	234.10	45.87	279.97
Contingent expenses.....	2,037.97	276.39	2,314.36
The Zone treasurer:			
Salaries and wages.....	377.50	287.50	665.00
The administration of justice:			
Salaries and wages.....	8,594.97	4,705.01	13,299.98
Per diem and traveling expenses.....	139.53		139.53
Contingent expenses.....	61.79		61.79

In cases where articles are recommended to be repaired, no expenditures for such repairs shall be made until authorized by the head of the department to which they pertain.

REPORT OF THE ISTHMIAN CANAL COMMISSION.

188

Expenditures to June 30, 1905—Continued.

DEPARTMENT OF GOVERNMENT AND SANITATION—Continued.

	To April 1.	April 3 to June 30.	Total.
Division of internal revenue:			
Salaries and wages.....	\$6,626.82	\$5,767.62	\$12,454.34
Per diem and traveling expenses.....	148.57	147.98	296.55
Contingent expenses.....	384.37		384.37
Postal service:			
Salaries and wages.....	4,419.55	1,890.00	5,809.55
Per diem and traveling expenses.....	222.06	22.25	244.30
Mail transportation.....	81.50	97.25	178.75
Contingent expenses.....	3,948.44	600.00	4,548.44
Police and prisons:			
Salaries and wages.....	46,075.49	18,440.26	64,515.75
Per diem and traveling expenses.....	623.10	176.25	799.35
Contingent expenses.....	1,877.80	401.23	2,279.02
Sanitation, hospitals and asylums:			
Office of chief sanitary officer—			
Salaries and wages.....	33,744.56	40,882.41	74,626.97
Per diem and traveling expenses.....	3,167.95	249.69	3,417.64
Contingent expenses.....	967.80		967.80
Director of hospitals:			
Salaries and wages.....	891.84	1,997.00	2,888.84
Per diem and traveling expenses.....		15.15	15.15
Ancon Hospital:			
Salaries and wages.....	78,866.99	28,191.69	105,058.68
Per diem and traveling expenses.....	2,370.37	3.90	2,374.27
Contingent expenses.....	616.13	39.75	655.88
Bohio Hospital:			
Salaries and wages.....	1,266.18	145.00	1,411.18
Per diem and traveling expenses.....	125.00		125.00
Contingent expenses.....	25.00	21.67	46.67
Colon Hospital:			
Salaries and wages.....	13,569.56	8,107.64	21,677.10
Per diem and traveling expenses.....	115.67	43.05	158.72
Contingent expenses.....	147.13	160.00	307.13
Cristobal and line as far as Bohio:			
Salaries and wages.....	1,148.14	126.00	1,274.14
Culebra Hospital:			
Salaries and wages.....	1,882.85	636.33	2,519.18
Contingent expenses.....	99.41		99.41
Gamboa and Bas Obispo:			
Salaries and wages.....	25.84		25.84
Gorgona Hospital:			
Salaries and wages.....	2,494.24	1,219.88	3,714.12
Per diem and traveling expenses.....	86.92		86.92
Miraflores Hospital:			
Salaries and wages.....	1,687.06	1,855.92	3,542.98
Per diem and traveling expenses.....	10.99		10.99
Contingent expenses.....	3.06		3.06
Panama, Corozal and La Boca dispensary:			
Salaries and wages.....	150.00	582.50	732.50
Convalescent station at Taboga Island:			
Salaries and wages.....	1,595.48	79.62	1,675.10
Contingent expenses.....	1.65		1.65
Hospital service, general:			
Salaries and wages.....	9,528.59	40.00	9,568.59
Per diem and traveling expenses.....	134.58		134.58
Contingent expenses.....	505.23		505.23
Quarantine station, Panama:			
Salaries and wages.....	2,958.08	1,415.12	4,373.80
Per diem and traveling expenses.....	121.09	35.80	156.89
Contingent expenses.....	81.82		81.82
Quarantine station, Colon:			
Salaries and wages.....	2,785.21	1,421.67	4,206.88
Maritime quarantine:			
Salaries and wages.....	323.49	416.67	740.16
Per diem and traveling expenses.....	1.25		1.25
Detention barracks, Panama:			
Salaries and wages.....	333.77	420.83	759.60
Per diem and traveling expenses.....		6.25	6.25
Detention barracks, Colon:			
Salaries and wages.....	863.31	100.00	963.31
Health officer, Panama and Colon:			
Office of health officer—			
Salaries and wages.....	126.20	26,788.51	26,914.71
Per diem and traveling expenses.....	16.35	168.75	185.10
Contingent expenses.....	44.50		44.50
Street cleaning, Panama:			
Salaries and wages.....	5,841.22	7,190.96	13,032.18
Per diem and traveling expenses.....	6.50		6.50
Contingent expenses.....	2,596.00	4,190.50	6,786.50

REPORT OF THE ISTHMIAN CANAL COMMISSION.

Expenditures to June 30, 1905—Continued.

DEPARTMENT OF GOVERNMENT AND SANITATION—Continued.

	To April 1.	April 3 to June 30.	Total.
Mosquito, contagious diseases, and disinfecting service, Panama:			
Salaries and wages.....	\$827.60	\$2,067.78	\$2,915.38
Per diem and traveling expenses.....	35.31		35.31
Contingent expenses.....	95.30	76.00	171.30
Street cleaning, Colon:			
Salaries and wages.....	1,328.43	402.63	1,761.06
Contingent expenses.....		1,412.50	1,412.50
Mosquito, contagious diseases, and disinfecting service, Colon:			
Salaries and wages.....	215.25	5,174.04	5,389.29
Contingent expenses.....	215.00		215.00
Street cleaning, general:			
Salaries and wages.....	69,256.68		69,256.68
Per diem and traveling expenses.....	449.13		449.13
Contingent expenses.....	1,054.50		1,054.50
Improvement of Zone highways, construction division:			
Salaries and wages.....	9,249.67		9,249.67
Contingent expenses.....	27.83		27.83
Street paving, Panama:			
Salaries and wages.....	68.39	638.39	696.72
Construction of waterworks and sewers, Panama, Ancon, and Rio Grande:			
Salaries and wages.....	78,002.79	50,463.99	128,466.78
Per diem and traveling expenses.....	150.71	8.00	158.71
Construction, waterworks and sewers, Colon:			
Salaries and wages.....	12,094.45	5,781.67	17,876.12
Intermediate water supply:			
Salaries and wages.....	12,714.72	26,686.83	39,401.55
Per diem and traveling expenses.....	149.25	101.75	251.00
Construction and repair of buildings:			
For Government and sanitation purposes.....	42,912.69	34,564.11	77,476.80
Purchase of furniture, equipment, and instruments:			
Hospital at Colon.....	7.47	61.10	68.57
Sanitary department, general.....	930.02		930.02
Disinfecting apparatus.....	6,180.00		6,180.00
SUMMARY.			
The executive office.....	18,199.20	11,023.85	29,223.05
The Zone treasurer.....	377.50	287.50	665.00
The administration of justice.....	8,796.29	4,705.01	13,501.30
The collector of revenue.....	15,891.30	8,025.00	23,916.30
Police and prisons.....	48,576.39	19,017.73	67,594.12
Sanitation.....	119,987.28	88,653.77	208,641.05
Hospitals and asylums.....	122,820.92	47,031.94	169,852.86
Improvement of Zone highways.....	9,277.50		9,277.50
Street improvement, Panama.....	68.33	538.39	606.72
Construction of water works and sewers.....	108,111.92	83,042.24	196,154.16
Construction and repair of buildings.....	42,912.69	34,564.11	77,476.80
Purchase of furniture and equipment.....	7,117.49	61.10	7,178.59
Total disbursements, second department.....	497,136.81	296,950.64	794,087.45

DEPARTMENT OF CONSTRUCTION AND ENGINEERING.

	To April 1.	April 3 to June 30.	Total.
Office of chief engineer:			
Salaries and wages.....	\$113,741.77	\$13,439.17	\$127,180.94
Per diem and traveling expenses.....	27,554.45	555.85	28,110.30
Contingent expenses.....	6,086.50	128.08	6,214.58
Principal assistant engineer in charge of records and office:			
Salaries and wages.....		9,467.03	9,467.03
Per diem and traveling expenses.....		10.85	10.85
Mechanical engineer:			
Salaries and wages.....	1,592.42	7,467.00	9,059.42
Per diem and traveling expenses.....	12.11	56.95	69.06
Office of general manager, labor and quarters:			
Salaries and wages.....	13.84	14,180.76	14,194.60
Per diem and traveling expenses.....	.40	164.18	164.58
Bureau of waterworks, sewers, and roads:			
Salaries and wages.....	1,714.66	8,339.00	10,053.66
Per diem and traveling expenses.....	58.61	76.70	135.31
Bureau of architecture and buildings:			
Salaries and wages.....	243.33	8,383.16	8,626.49
Per diem and traveling expenses.....	11.10	138.55	149.65
Contingent expenses.....		15.00	15.00

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rial covered by the proposal which he guarantees.
If bidders prefer to execute and file an annual guaranty to cover their bids, proper blank forms will be sent them upon receipt by this office of application therefor.

171

REPORT OF THE ISTHMIAN CANAL COMMISSION.

195

Expenditures to June 30, 1906—Continued.

DEPARTMENT OF CONSTRUCTION AND ENGINEERING—Continued.

	To April 1.	April 3 to June 30.	Total.
Bureau of telegraph, telephone, and electric lights:			
Salaries and wages.....	\$968.19	\$1,440.00	\$2,408.19
Per diem and traveling expenses.....	18.10	21.98	40.08
Bureau of meteorology and river hydraulics:			
Salaries and wages.....		\$42.33	\$42.33
Bureau of map making, lithography, and printing:			
Salaries and wages.....	7,449.80	4,061.72	11,511.52
Canal construction, Colon division—office of division engineer:			
Salaries and wages.....	25,594.07	19,800.28	45,394.35
Per diem and traveling expenses.....	530.15	14.10	544.25
Contingent expenses.....	15.80	80.00	95.80
Excavation:			
Salaries and wages.....	7,624.23	2,323.44	9,947.67
Tracks:			
Salaries and wages.....	1,250.87	4,223.87	5,474.74
Docks, foundations:			
Salaries and wages.....	1,080.41	884.85	1,965.26
Bohio dam:			
Salaries and wages.....	26,756.66		26,756.66
Per diem and traveling expenses.....	738.73		738.73
Contingent expenses.....	24.67		24.67
Surveys, Colon division:			
Salaries and wages.....	6,227.11		6,227.11
Per diem and traveling expenses.....	27.41		27.41
Chagres division—office of division engineer:			
Salaries and wages.....	2,733.53	12,801.29	15,534.82
Per diem and traveling expenses.....	70.56	4.00	74.56
Contingent expenses.....		1.00	1.00
Excavation:			
Salaries and wages.....	106.75		106.75
Gamboa division—office of division engineer:			
Salaries and wages.....		804.79	804.79
Gamboa dam:			
Salaries and wages.....	32,282.83		32,282.83
Per diem and traveling expenses.....	2,367.86		2,367.86
Contingent expenses.....	23.75		23.75
Gatun dam:			
Salaries and wages.....	17,826.62		17,826.62
Per diem and traveling expenses.....	873.22		873.22
Contingent expenses.....	84.32		84.32
Culebra division, office of division engineer:			
Salaries and wages.....	55,342.31	66,701.57	122,043.88
Per diem and traveling expenses.....	13.11	122.74	135.85
Office of resident engineer in charge of surveys:			
Salaries and wages.....	32,883.71	2,753.31	35,637.02
Per diem and traveling expenses.....	190.90	27.92	218.82
Cuts, excavations:			
Salaries and wages.....	51,684.09	66,436.48	118,120.57
Tools and implements.....	2,012.79		2,012.79
Repairs to equipment.....	11,242.31		11,242.31
Contingent expenses.....	19,393.00		19,393.00
Cuts, dumps:			
Salaries and wages.....	21,064.29	15,445.76	36,510.05
Cuts, mining:			
Salaries and wages.....	16,019.79	8,945.57	24,965.36
Cuts, tracks:			
Salaries and wages.....	70,176.77	66,064.36	136,241.13
Per diem and traveling expenses.....	29.50		29.50
La Boca division, office of division engineer:			
Salaries and wages.....	1,450.63	17,193.49	18,644.12
Per diem and traveling expenses.....	6.54	47.70	54.24
Contingent expenses.....	4.50		4.50
Excavation:			
Salaries and wages.....		1,057.50	1,057.50
Harbor and dredging:			
Salaries and wages.....	185.52	1,169.05	1,354.57
Bas Matachin machine shops:			
Salaries and wages.....	7,655.95	59,374.08	67,030.03
Per diem and traveling expenses.....	38.25	27.10	65.35
Small tools.....	712.29	233.86	946.15
Contingent expenses.....		2.40	2.40
Cristobal machine shops:			
Salaries and wages.....	3,670.07	27,649.17	31,319.24
Small tools.....	394.06	181.06	575.12
Culebra machine shop:			
Salaries and wages.....		21,997.84	21,997.84
Empire machine shop:			
Salaries and wages.....	3,197.45	29,327.67	32,525.12
Per diem and traveling expenses.....	21.80	4.75	26.55
Small tools.....	55.50	83.39	138.89

*Prior to April 1 expenses of machine shops were distributed to the division of the work receiving the benefit of the work done by machine shops.

186 REPORT OF THE ISTHMIAN CANAL COMMISSION.

Expenditures to June 30, 1905—Continued.

DEPARTMENT OF CONSTRUCTION AND ENGINEERING—Continued.

	To April 1.	April 3 to June 30.	Total.
La Boca machine shop:			
Salaries and wages.....	\$2,954.29	\$10,328.57	\$13,282.86
Purchase of La Boca shops.....	8,425.79		8,425.79
Purchase of furniture, equipment, and instruments:			
Office of chief engineer.....	255.55		255.55
Canal construction:			
Excavating and dredging machines.....	21,050.00		21,050.00
Construction and repair of buildings.....	65,149.43	100,378.95	165,528.38
Excavating and dredging machines:			
Repairs.....	8,319.12		8,319.12
Superintendence.....	119.33		119.33
Railroad construction and equipment:			
Repairs of rolling stock.....	26,204.70		26,204.70
Repairs of machine and hand tools.....	15,164.59		15,164.59
Superintendence.....	1,359.44		1,359.44
Miscellaneous equipment:			
Repairs of floating equipment not dredges.....	14,408.14	116.67	14,524.81
Repairs of furniture, etc.....	247.60		247.60
Repairs of machine and hand tools.....	9,594.90		9,594.90
SUMMARY.			
Chief engineer.....	159,374.78	66,233.32	225,608.10
Colon division.....	69,870.11	27,276.49	97,146.60
Chagres division.....	2,910.84	12,806.29	15,717.13
Gamboa division.....	53,458.60	804.79	54,263.39
Culebra division.....	279,552.57	226,497.71	506,050.28
La Boca division.....	1,647.19	19,467.74	21,114.93
Machine shop expenses.....	18,730.65	119,110.79	167,841.44
Purchase of La Boca shops.....	8,425.79		8,425.79
Purchase of furniture, equipment, and instruments.....	21,336.60		21,336.60
Construction and repair of buildings.....	65,149.43	100,378.95	165,528.38
Repairs of excavating and dredging machines.....	8,438.45		8,438.45
Railroad construction and repair of railroad equipment.....	42,728.73		42,728.73
Repairs of miscellaneous equipment.....	24,250.64	116.67	24,367.31
Total disbursements, third department.....	755,874.38	602,692.75	1,358,567.13

SUMMARY OF EXPENDITURES IN ALL DEPARTMENTS.

	To April 1.	April 3 to June 30.	Total.
General expenses of the Commission.....	\$126,571.74	\$31,255.52	\$157,827.26
Department of administration.....	86,291.43	38,629.08	124,920.51
Department of government and sanitation.....	43,264.29	24,041.36	67,305.65
Department of construction and engineering.....	159,374.78	66,233.32	225,608.10
Sanitation.....	119,587.28	88,658.77	208,246.05
Hospitals and asylums.....	122,820.92	47,031.94	169,852.86
Construction of waterworks, sewers, and roads.....	112,457.75	83,580.63	196,038.38
Police and prisons.....	48,576.39	19,017.73	67,594.12
Canal construction.....	407,439.31	286,853.02	694,292.33
Machine shop expenses.....	18,730.65	149,110.79	167,841.44
Repairs to equipments.....	75,417.82	116.67	75,534.49
Material, supplies, and equipment purchased.....	897,061.49	151,512.72	1,048,574.21
Cost of purchase, handling, and transportation of material and supplies.....	145,561.09	105,325.95	250,887.04
Purchase of furniture, equipment, and instruments.....	36,754.89	2,397.54	39,152.43
Purchase of La Boca shops.....	8,425.79		8,425.79
Purchase of land and buildings.....	41,790.00	4,500.00	46,290.00
Construction and repair of buildings.....	159,874.80	145,225.81	305,100.61
Purchase of Panama R. R. stock.....	155,657.49		155,657.49
Total.....	2,766,067.91	1,243,485.85	4,009,553.76

^a Prior to April 1 work done by machine shops was charged directly to the division of work receiving the benefit.

^b Material, supplies, and equipment purchased and cost of purchase, handling, and transportation are common to the several divisions, offices, and classes of work, and are to be distributed to them in equitable proportion.

• Bidders should insert here the place where delivery is proposed to be made. All deliveries must be made on dock or in warehouse at point of delivery, as the Commission shall direct in each case.

(1) EXHIBIT L.

DETAILED STATEMENT OF EXPENDITURES JULY 1 TO
SEPTEMBER 30, 1905, BY DEPARTMENTS.

GENERAL, AND DEPARTMENT OF ADMINISTRATION.

	For indebtedness incurred—		Total.
	Prior to April 1, 1906.	After April 1, 1906.	
GENERAL.			
Isthmian Canal Commission:			
Salaries of Commissioners.....		\$7,629.58	\$7,629.58
Transportation.....		118.72	118.72
Furniture and fixtures.....	\$1.00	268.25	269.25
Transportation employees to and from Isthmus.....	11,952.38	18,868.73	30,821.11
Contingent expenses.....	10.25	8,693.50	8,703.75
Office of committee on engineering:			
Salaries and wages.....		65.00	65.00
Transportation.....		292.27	292.27
Furniture and fixtures.....		829.29	829.29
Contingent expenses.....		92.59	92.59
Special Commissioner J. L. Bristow:			
Extra compensation.....		2,500.00	2,500.00
Per diem and traveling expenses.....		1,147.35	1,147.35
Contingent expenses.....		.43	.43
Secretary to special commissioner:			
Per diem and traveling expenses.....		287.90	287.90
Contingent expenses.....		1.20	1.20
Board of consulting engineers:			
Salaries and wages.....		207.00	207.00
Per diem and traveling expenses.....		1,658.50	1,658.50
Transportation.....		887.08	887.08
Contingent expenses.....		8.75	8.75
DEPARTMENT OF ADMINISTRATION.			
Chairman:			
Salaries and wages.....		5,625.00	5,625.00
Contingent expenses.....		54.09	54.09
Office of administration:			
Salaries and wages.....		16,711.96	16,711.96
Transportation.....		731.75	731.75
Furniture and fixtures.....	452.83	8,206.90	8,659.73
Contingent expenses.....	390.28	6,574.93	6,965.21
General auditor:			
Washington office—			
Salaries and wages.....		9,110.73	9,110.73
Transportation.....		143.55	143.55
Furniture and fixtures.....		1,247.21	1,247.21
Contingent expenses.....	2.50	225.01	227.51
Isthmus office—			
Salaries and wages.....		12,866.00	12,866.00
Furniture and fixtures.....		303.00	303.00
Contingent expenses.....		1,450.45	1,450.45
Disbursing officers:			
Washington office—			
Salaries and wages.....		2,115.00	2,115.00
Transportation.....		77.60	77.60
Furniture and fixtures.....		267.44	267.44
Contingent expenses.....		107.10	107.10
Isthmus office—			
Salaries and wages.....		7,585.89	7,585.89
Transportation.....	469.75	270.40	740.15
Contingent expenses.....	7.22	6,086.65	6,093.87
MATERIAL AND SUPPLIES, &c			
Purchased in United States.....	159,892.19	740,689.56	900,581.75
Purchased on Isthmus.....	3,748.50	99,201.83	102,950.33
Steamers owned.....		1,300,000.00	1,300,000.00
Floating equipment.....	8,868.84		8,868.84

* Material and supplies purchased and cost of purchase, handling, and transportation of material and supplies are common to the several divisions, offices, and classes of work and are to be distributed to them in equitable proportion.

Expenditures from July 1 to September 30, 1905—Continued.

GENERAL, AND DEPARTMENT OF ADMINISTRATION—Continued.

	For Indebtedness Incurred—		Total.
	Prior to April 1, 1906.	After April 1, 1906.	
COST OF PURCHASE, HANDLING, AND TRANSPORTATION OF MATERIAL AND SUPPLIES.			
General purchasing officer:			
Washington office—			
Salaries and wages		\$10,286.00	\$10,286.00
Transportation		249.30	249.30
Furniture and fixtures	\$127.00	1,557.16	1,684.16
Services of inspectors	111.28	6,800.71	6,911.99
Transportation of inspectors	58.55	407.61	466.16
Contingent expenses		2,822.11	2,822.11
Assistant purchasing and shipping agents:			
New York office—			
Salaries and wages	6.23	2,571.65	2,577.88
Transportation		9.76	9.76
Furniture and fixtures	18.25	439.29	457.54
Contingent expenses	4.35	1,103.75	1,108.10
New Orleans office—			
Salaries and wages		611.11	611.11
Transportation		55.90	55.90
Furniture and fixtures		21.85	21.85
Contingent expenses		134.06	134.06
Tacoma office—			
Salaries and wages		482.61	482.61
Transportation		224.90	224.90
Furniture and fixtures		193.07	193.07
Contingent expenses		120.30	120.30
San Francisco office—			
Salaries and wages		166.66	166.66
Material and supplies division on Isthmus:			
Office of chief of material and supplies—			
Salaries and wages		22,487.54	22,487.54
Transportation of employees	641.72	45.00	586.72
Contingent expenses	262.44	294.52	643.96
Freight, advertising, etc.	48,116.79	74,929.79	123,046.58
Storehouses—			
Salaries and wages		111,511.31	111,511.31
Contingent expenses	100.00	300.83	400.83
Total first department	235,242.35	2,495,521.89	2,730,764.24

DEPARTMENT OF GOVERNMENT AND SANITATION.

Executive office:			
Salaries and wages.....		\$19,217.73	\$19,217.73
Transportation.....	\$1,822.50	1.00	1,823.50
Furniture and fixtures.....		129.15	129.15
Contingent expenses.....	180.00	1,798.46	1,978.46
Zone treasurer: Contingent expenses.....		25.00	25.00
Administration of justice:			
Prosecuting attorney—			
Salaries and wages.....		1,738.73	1,738.73
Contingent expenses.....	348.33	214.20	562.53
Supreme court—			
Salaries and wages.....	403.75	3,114.65	3,518.40
Transportation.....		15.35	15.35
Contingent expenses.....		1.86	1.86
Circuit court—			
Salaries and wages.....		3,518.43	3,518.43
Transportation.....		15.35	15.35
Contingent expenses.....		14.40	14.40
Collector of revenue and director of posts:			
Customs service—			
Salaries and wages.....		1,055.45	1,055.45
Contingent expenses.....		.92	.92
Division of internal revenue—			
Salaries and wages.....		1,192.28	1,192.28
Traveling expenses.....		28.15	28.15
Contingent expenses.....		15.36	15.36
Postal service—			
Salaries and wages, superintendence.....		1,371.83	1,371.83
Salaries and wages, postmasters.....		1,219.91	1,219.91
Railway mail clerks.....		587.08	587.08

*Material and supplies purchased and cost of purchase, handling, and transportation of material and supplies are common to the several divisions, offices, and classes of work and are to be distributed to them in equitable proportion.

REPORT OF THE ISTHMIAN CANAL COMMISSION.

189

Expenditures from July 1 to September 30, 1905—Continued.

DEPARTMENT OF GOVERNMENT AND SANITATION—Continued.

	For indebtedness incurred—		Total.
	Prior to April 1, 1905.	After April 3, 1905.	
Collector of revenue and director of posts—Continued.			
Postal service—Continued.			
Transportation of mails.....	\$560.60	\$589.88	\$1,100.48
Traveling expenses.....	59.62		59.62
Contingent expenses.....		51.91	51.91
Division of education—			
Salaries and wages, superintendence.....		540.45	540.45
Contingent expenses.....		92.12	92.12
Division of estates—			
Salaries and wages.....		360.29	360.29
Contingent expenses.....		.92	.92
Land department—			
Salaries and wages.....		2,438.69	2,438.69
Surveying expenses.....		1,494.53	1,494.53
Contingent expenses.....		93.54	93.54
Police and prisons:			
General headquarters—			
Salaries and wages.....		3,596.49	3,596.49
Transportation.....	5.50		5.50
Furniture and fixtures.....		7.68	7.68
Contingent expenses.....		78.73	78.73
La Boca jail, equipment.....	112.93		112.93
Empire Penitentiary, subsistence of prisoners.....		315.03	315.03
Municipality of Ancon—			
Salaries and wages.....		5,255.51	5,255.51
Transportation.....		28.20	28.20
Contingent expenses.....		81.35	81.35
Municipality of Emperador—			
Salaries and wages.....		6,158.54	6,158.54
Equipment.....		67.30	67.30
Contingent expenses.....		5.20	5.20
Municipality of Gorgona—			
Salaries and wages.....		2,284.52	2,284.52
Contingent expenses.....		42.03	42.03
Municipality of Buena Vista, salaries and wages.....		1,221.96	1,221.96
Municipality of Cristobal—			
Salaries and wages.....		3,748.58	3,748.58
Equipment.....		16.65	16.65
Contingent expenses.....		14.00	14.00
Sanitation, hospitals, and asylums:			
Office of chief sanitary officer—			
Salaries and wages.....		8,843.11	8,843.11
Contingent expenses.....	6.75	1,264.15	1,270.90
Director of hospitals—			
Salaries and wages.....		2,585.63	2,585.63
Contingent expenses.....		46.38	46.38
Ancon Hospital—			
Salaries and wages.....		40,412.36	40,412.36
Transportation.....		148.15	148.15
Subsistence.....		1,396.62	1,396.62
Contingent expenses.....		627.16	627.16
Miraflores Hospital, salaries and wages.....		3,335.94	3,335.94
Paraiso Hospital, salaries and wages.....		150.00	150.00
Culebra Hospital—			
Salaries and wages.....		2,210.37	2,210.37
Contingent expenses.....		100.00	100.00
Gorgona Hospital—			
Salaries and wages.....		1,731.29	1,731.29
Contingent expenses.....	82.50		82.50
Colon Hospital—			
Salaries and wages.....		13,229.20	13,229.20
Transportation.....	3.75		3.75
Equipment.....		146.15	146.15
Subsistence.....		167.78	167.78
Contingent expenses.....	563.78	169.35	733.13
Panama, Corozal, and La Boca Dispensary, salaries and wages.....		748.21	748.21
Empire Dispensary, salaries and wages.....		564.55	564.55
Convalescent Station at Taboga Island, salaries and wages.....		185.14	185.14
Gambos and Bas Obispo Hospital, salaries and wages.....		7.50	7.50
Cristobal Dispensary, salaries and wages.....		150.00	150.00
Chief quarantine officer:			
Office of chief quarantine officer—			
Salaries and wages.....		3,246.57	3,246.57
Contingent expenses.....		180.79	180.79
Quarantine officer, Panama Quarantine Station—			
Salaries and wages.....		556.57	556.57
Transportation.....		161.85	161.85

States district attorney, United States commissioner, or a judge of a State or Federal court of record with the seal of said court attached. If the official can make the certificate as to both sureties, it will not be necessary to fill out the form next below.

• He, she, or each.

REPORT OF THE ISTHMIAN CANAL COMMISSION.

Expenditures from July 1 to September 30, 1905—Continued.

DEPARTMENT OF GOVERNMENT AND SANITATION—Continued.

	For indebtedness incurred—		Total.
	Prior to April 1, 1905.	After April 1, 1905.	
Chief quarantine officer—Continued.			
Quarantine officer, Panama Quarantine Station—cont'd.			
Subsistence.....		\$8,756.26	\$8,756.26
Contingent expenses.....		262.79	262.79
Quarantine officer—Colon—			
Office of quarantine officer—			
Salaries and wages.....		1,190.42	1,190.42
Contingent expenses.....		71.16	71.16
Quarantine station—Colon—			
Salaries and wages.....		190.49	190.49
Transportation.....		60.00	60.00
Health officer—Panama:			
Office of health officer—			
Salaries and wages.....		8,506.84	8,506.84
Transportation.....		33.00	33.00
Contingent expenses.....		339.47	339.47
Street-cleaning service—			
Salaries and wages.....		6,962.51	6,962.51
Transportation.....		4,686.50	4,686.50
Contingent expenses.....		292.00	292.00
Mosquito, contagious diseases, and disinfecting service—			
Salaries and wages.....		42,065.53	42,065.53
Transportation.....		1,576.75	1,576.75
Contingent expenses.....		190.50	190.50
Health officer—Colon:			
Office of health officer—			
Salaries and wages.....	\$33.50	4,279.84	4,313.34
Contingent expenses.....		456.58	456.58
Street-cleaning service—			
Salaries and wages.....		10,283.20	10,283.20
Transportation.....		1,406.25	1,406.25
Mosquito, contagious diseases, and disinfecting service—			
Salaries and wages.....		4,109.22	4,109.22
Transportation.....		617.50	617.50
Contingent expenses.....		16.10	16.10
Chief sanitary officer:			
Office of chief sanitary inspector—			
Salaries and wages.....		10,028.59	10,028.59
Contingent expenses.....	8.19	214.69	222.88
Mosquito, contagious diseases, and disinfecting service—			
Salaries and wages.....		55,218.59	55,218.59
Contingent expenses.....		3,531.06	3,531.06
Division of municipal engineering:			
Office of municipal engineer—			
Salaries and wages.....		249.80	249.80
Transportation.....	180.00	533.90	713.90
Contingent expenses.....	4.70	462.70	467.40
Improvement of zone highways:			
Construction of Sabanas road—			
Salaries and wages.....		8,863.79	8,863.79
Contingent expenses.....		20.00	20.00
Construction of La Boca road—			
Salaries and wages.....		4,997.29	4,997.29
Contingent expenses.....		40.00	40.00
Construction of Ancon Hill road, salaries and wages.....		2,264.95	2,264.95
Construction of Corozal road—			
Salaries and wages.....		1,659.70	1,659.70
Contingent expenses.....		5.00	5.00
Construction of St. Lazaro road, equipment.....		172.08	172.08
Construction of waterworks and sewers, Panama—			
Salaries and wages.....		79,515.88	79,515.88
Contingent expenses.....		553.80	553.80
Construction of waterworks and sewers, Colon—			
Salaries and wages.....		12,138.41	12,138.41
Contingent expenses.....		1.80	1.80
Construction and maintenance of waterworks and sewers on Zone—			
Salaries and wages.....		43,440.72	43,440.72
Contingent expenses.....		23.50	23.50
Paving, Panama—			
Salaries and wages.....		5,266.68	5,266.68
Office buildings, Isthmus, repairs of.....		803.39	803.39
Total, second department.....	4,376.40	462,876.90	466,953.30

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REPORT OF THE ISTHMIAN CANAL COMMISSION.

191

Expenditures from July 1 to September 30, 1905—Continued.

DEPARTMENT OF CONSTRUCTION AND ENGINEERING.

	For indebtedness incurred—		Total.
	Prior to April 1, 1905.	After April 1, 1905.	
Office of chief engineer:			
Salaries and wages.....		\$23,087.01	\$23,087.01
Transportation.....	\$1,207.50	925.61	2,133.11
Furniture and fixtures.....		100.00	100.00
Contingent expenses.....	275.00	1,639.36	1,914.36
Timekeeping bureau, contingent expenses.....		415.25	415.25
Office of manager, labor and quarters:			
Salaries and wages.....	4.17	22,864.29	22,868.46
Transportation.....		53.75	53.75
Contingent expenses.....	683.32	7,962.71	8,646.03
Division of meteorology and river hydraulics, salaries and wages.....		3,672.67	3,672.67
Division of building construction, expenses.....		285,343.51	285,343.51
Mechanical division:			
General superintendence—			
Salaries and wages.....		28,946.31	28,946.31
Transportation.....		50.00	50.00
Contingent expenses.....	14.78	338.04	352.82
Empire machine shops.....		45,911.06	45,911.06
Baa Matachiti machine shops.....	22.50	45,648.30	45,670.80
Cristobal machine shops.....		43,379.98	43,379.98
La Boca machine shops, contingent expenses.....		2.37	2.37
La Boca ship ways.....		30,481.68	30,481.68
Cristobal ship ways.....		12,004.69	12,004.69
Corrales:			
Ancon.....		11,386.06	11,386.06
Corozal.....		35.88	35.88
Culebra.....		3,993.11	3,993.11
Cristobal.....		2,084.96	2,084.96
Canal construction:			
Colon division—			
Office of division engineer—			
Salaries and wages.....		1,768.53	1,768.53
Transportation.....	8.53		8.53
Contingent expenses.....	20.00	431.20	451.20
Miscellaneous construction expenses—			
Engineering.....		3,465.14	3,465.14
Contingent expenses.....		840.05	840.05
Docks, transportation—			
Salaries and wages.....		26.67	26.67
Docks, foundations—			
Salaries and wages.....	86.82	53.22	140.04
Contingent expenses.....	609.69	230.00	839.69
Piers, foundations—			
Salaries and wages.....	68.16		68.16
Equipment.....	135.00		135.00
Cuts, dredging—			
Salaries and wages.....		156.25	156.25
Harbors, dredging—			
Salaries and wages.....		3,375.66	3,375.66
Repairs to equipment.....		62.72	62.72
Chagres division—			
Miscellaneous construction expenses, engineering.....		325.50	325.50
Cuts, foundations, salaries, and wages.....		14.00	14.00
Cuts, transportation, salaries, and wages.....		8.33	8.33
Cuts, excavations—			
Transportation of material.....	33.00		33.00
Contingent expenses.....	256.00		256.00
Gamboa division—			
Office of division engineer, contingent expenses.....		264.97	264.97
Miscellaneous construction expenses—			
Engineering.....		16,502.89	16,502.89
Contingent expenses.....		161.94	161.94
Culebra division—			
Office of division engineer—			
Salaries and wages.....		4,606.95	4,606.95
Transportation.....	8.98		8.98
Contingent expenses.....		1,843.14	1,843.14
Miscellaneous construction expenses—			
Engineering.....		48,031.86	48,031.86
Contingent expenses.....		13.28	13.28
Repairs and renewals of buildings.....		4,238.26	4,238.26
Cuts, excavations—			
Salaries and wages.....		42,390.41	42,390.41
Transportation of material.....	678.00		678.00
Repairs to equipment.....		192.43	192.43
Contingent expenses.....	8,160.91	1,230.74	9,441.65

Expenditures from July 1 to September 30, 1905—Continued.

DEPARTMENT OF CONSTRUCTION AND ENGINEERING—Continued.

	For indebtedness incurred—		Total.
	Prior to April 1, 1905.	After April 1, 1905.	
Canal construction—Continued.			
Culebra division—Continued.			
Cuts, transportation—			
Salaries and wages.....		\$87,958.96	\$87,958.96
Tracks and track repairs.....		62,475.72	62,475.72
Repairs to equipment.....		4,922.08	4,922.08
Superintendent of transportation—			
Salaries and wages.....		175.00	175.00
Transportation.....		71.15	71.15
Contingent expenses.....		135.49	135.49
Superintendent of dumps, contingent expenses.....		55.97	55.97
Cuts, dumps—			
Salaries and wages.....		16,498.46	16,498.46
Tracks and track repairs.....		429.84	429.84
Contingent expenses.....		207.42	207.42
Cuts, tracks, contingent expenses.....	\$6.43		6.43
Dams, tracks, contingent expenses.....	169.26		169.26
Quarters for employees, salaries and wages.....		16.20	16.20
Ia Boca division—			
Office of division engineer, contingent expenses.....		45.25	45.25
Office of resident engineer, contingent expenses.....		315.20	315.20
Miscellaneous construction expenses—			
Engineering.....		5,633.33	5,633.33
Contingent expenses.....		386.15	386.15
Harbors, dredging—			
Salaries and wages.....		12,854.12	12,854.12
Contingent expenses.....	321.91		321.91
Cuts, excavations, contingent expenses.....		7.50	7.50
Docks, foundations—			
Salaries and wages.....		978.37	978.37
Material used.....		928.27	928.27
Contingent expenses.....	56.10	160.61	226.10
Dams, masonry, contingent expenses.....	269.50		269.50
Total disbursements, third department.....	10,089.66	874,741.19	884,830.85

E. S. BENSON, General Auditor.

WASHINGTON, D. C., December 3, 1905.

All accounts of the Isthmian Canal Commission, whether audited in Washington or on the Isthmus, will be sent to the Treasury Department through the Washington office. Necessary duplicates will be retained in the office of the general auditor.

178

EXHIBIT M.

CONSOLIDATED STATEMENT OF EXPENDITURES TO SEPTEMBER 30, 1905.

	To June 30, 1905.	July 1 to Sept. 30, 1905.	Total.
General expenses:			
Isthmian Canal Commission	\$137,714.57	\$47,542.41	\$185,256.98
Office committee on engineering	5,793.07	3,535.48	9,328.55
Special Commissioners	14,320.02	8,936.88	23,256.90
Department of administration:			
Office of administration	67,961.72	94,051.04	162,012.76
General auditor, Washington office	79,406.21	10,734.00	90,140.21
General auditor, Isthmus office	5,331.33	14,619.45	19,950.78
Disbursing officer, Washington	8,714.28	2,567.14	11,281.42
Disbursing officer, Isthmus	18,406.37	14,419.91	32,826.28
The land department	5,100.60	4,026.76	9,127.36
Department of government and sanitation:			
Executive office	20,228.05	23,148.84	43,376.89
Zone treasurer	665.00	25.00	690.00
Administration of justice	13,501.30	9,345.05	22,846.35
Collector of revenue	28,916.80	7,676.77	36,593.57
Sanitation	208,641.05	174,764.40	383,405.45
Hospitals and asylums	169,852.86	64,678.69	234,531.55
Construction of waterworks, sewers, and roads—			
Zone highway improvements	9,277.50	18,022.81	27,300.31
Street improvements, Panama	606.72	5,266.63	5,873.35
Construction of waterworks and sewers	186,154.16	135,678.61	321,832.77
Police and prisons	67,594.12	23,040.20	90,634.32
Department of construction and engineering:			
Office chief engineer	182,485.22	27,284.48	209,769.70
Manager labor and quarters and corrals	14,358.68	49,068.19	63,426.87
Bureau waterworks, sewers, and roads	10,196.97	961.10	11,158.07
Bureau telegraph, telephone, and electric light	2,344.24	.....	2,344.24
Bureau meteorology and river hydraulics	842.33	3,672.67	4,515.00
Canal construction	694,292.33	315,812.29	1,010,104.62
Machine shops expenses	292,514.41	215,568.55	508,082.96
Purchase Panama R. R. stock	156,667.49	.....	156,667.49
Purchase steamers Habana and Mexico .....	.....	1,300,000.00	1,300,000.00
Construction and repair of buildings	311,886.75	285,343.51	597,230.26
Purchase of La Boca shops	8,425.79	.....	8,425.79
Purchase of land and buildings	46,290.00	.....	46,290.00
Material, supplies, and equipment purchased ^a	1,087,726.64	1,000,582.08	2,088,308.72
Cost of purchase, handling, and transportation, material and supplies:			
General purchasing officer, Washington	17,470.85	22,419.72	39,890.57
Assistant purchasing agent, New York	4,951.43	4,153.28	9,104.71
Assistant purchasing agent, New Orleans	695.35	822.92	1,518.27
Assistant purchasing agent, Tacoma .....	.....	1,020.88	1,020.88
Assistant purchasing agent, San Francisco .....	.....	166.66	166.66
Division of material and supplies, Isthmus freight, advertising, etc.	21,038.65	123,046.58	144,085.23
Total	4,009,543.76	4,085,548.89	8,095,092.65

^a Material, supplies, and equipment purchased and cost of purchase, handling, and transportation are common to the several divisions, offices, and classes of work, and are to be distributed to them in equitable proportion.

EXHIBIT N.

STATEMENT OF MISCELLANEOUS RECEIPTS FROM ALL SOURCES.

	To April 1.	April 3 to June 30.	Total.
UNITED STATES FUNDS.			
Sales:			
Sales of material and supplies.....	\$4,034.77	\$384.55	\$4,419.32
Sales of water.....	256.88		256.88
Electric lighting.....	13.20	305.57	318.77
Commissary supplies.....	1,438.90	23,834.73	25,273.63
Mess accounts, Ancon Hospital.....	3,412.65	1,670.00	5,082.65
Receipts from pay patients, Ancon Hospital.....	1,576.24	1,353.75	2,929.99
Mess accounts, Colon Hospital.....	105.00	150.00	255.00
Receipts from pay patients, Colon Hospital.....	768.68	207.30	975.98
Receipts from pay patients, other hospitals.....		7.00	7.00
Mess accounts, other hospitals.....	167.89		167.89
Rentals and taxes:			
Rents of land and buildings.....	10,429.75	2,478.42	12,918.17
Rent of equipment.....	1.88	1,142.56	1,158.44
Rent of material.....	4,163.38	475.36	4,638.74
Real estate tax.....	198.29		198.29
Work done:			
Labor and material furnished.....	149.32	8,545.75	8,695.07
Reimbursements for overpayments and for services and supplies.....	377.35	2,369.77	2,747.12
50 per cent earnings joint telegraph lines.....		1,138.45	1,138.45
Gain on exchange of currency.....	459.45		459.45
Total United States funds.....	27,577.63	44,063.21	71,640.84
ZONE GOVERNMENT REVENUES.			
Postal revenues.....	7,372.25	3,671.40	11,043.65
Internal revenues:			
Slaughter tax.....	1,547.46		1,547.46
Tax on sale of liquor.....	2,511.59		2,511.59
Tax on distilling apparatus.....	3,708.80	1,276.72	4,985.52
Internal-revenue stamps.....	26.86	3.31	30.17
Stamped paper.....	141.22	68.72	209.94
Miscellaneous revenues:			
Court fees and fines.....	12.10	158.35	170.45
Police department fines.....	16.68	46.00	62.68
Forfeited bonds.....	466.73		466.73
Examination fees.....	5.00	5.00	10.00
Permits to carry firearms.....	10.00	5.00	15.00
Quarantine receipts.....	58.50	148.50	207.00
Money left by deceased patients.....	19.40		19.40
Miscellaneous receipts.....	43.85		43.85
Total Zone government funds.....	15,935.44	5,383.01	21,318.45
Total from all sources.....	43,513.07	49,446.22	92,959.29

Services of inspectors	1,864.70	1,053.82	2,898.52
Per diem and traveling expenses of inspectors	29.50	.....	29.50
Contingent expenses	1,766.26	1,756.02	3,522.28

EXHIBIT O.

LAWS PASSED BY PRECEDING COMMISSION SUBSEQUENT TO LAST ANNUAL REPORT.

LAWS OF THE CANAL ZONE.

THE RIGHT OF EXPROPRIATION.

[Act No. 21.]

AN ACT to amend section 6 of act No. 6, Laws of the Canal Zone, entitled "An act authorizing the exercise of the right of expropriation within the Canal Zone, Isthmus of Panama, as to real estate and immovable property, and as to personal property and property that is partly personal and partly real, and providing the method of procedure for exercising that right."

By authority of the President of the United States, be it enacted by the Isthmian Canal Commission:

SECTION 1. That section 6 of act No. 6, Laws of the Canal Zone, Isthmus of Panama, entitled "An act authorizing the exercise of the right of expropriation within the Canal Zone, Isthmus of Panama, as to real estate and immovable property, and as to personal property and property that is partly personal and partly real, and providing the method of procedure for exercising that right," be, and the same is hereby, amended, to read as follows:

SEC. 2. The United States, or the government of the Canal Zone, in exercising the right of expropriation, shall proceed as follows: The governor of the Canal Zone shall give written notice to the members of the joint commission nominated by the President of the United States and the President of the Republic of Panama, pursuant to the provisions of Article XV of the convention between the United States and the Republic of Panama, dated November 18, 1903, that it is the purpose and desire of the United States, or the government of the Canal Zone, as the case may be, to condemn certain private property for public uses, which said notice shall set forth a description of the property sought to be expropriated, describing the land by metes and bounds when practicable, and when such description is not practicable, then in such terms and manner as will enable said joint commission to ascertain and locate the lands sought to be expropriated. The joint commission shall thereupon convene at the office of the governor of the Canal Zone. The members of said commission shall take and subscribe an oath before any officer authorized to administer oaths at the time and place that they will faithfully perform their duties as appraisers, which oath shall be attached to the report of their proceedings. The commission are hereby authorized to take evidence as

to the value of the property sought to be expropriated, and for this purpose may administer oaths on hearings before them and compel the attendance of witnesses and the production of papers and documents; and the commissioners shall, unless the parties consent to the contrary, go to the premises together and view the property sought to be condemned and its surroundings, and may examine and measure the same. The commission shall assess the value of the property taken and used, and also assess the consequential damages to the remainder of the tract not taken, and deduct from such consequential damages the consequential benefits to be derived by the owner from the public use of the land taken: *Provided*, The consequential benefits assessed shall in no case exceed the consequential damages assessed: *Provided further*, That nothing in this section shall be construed so as to deprive the owner of the actual value of the property taken or used. In case of disagreement of the commission (by reason of their being equally divided in conclusion), the matter shall be referred to the umpire appointed by the two Governments, who shall render the decision. The commissioners shall forthwith make full and accurate report in writing of all their proceedings in said matter, which report shall be signed by the commission, and shall be filed in the office of the governor of the Canal Zone. The governor of the Canal Zone shall also notify the owner of the lands sought to be expropriated of the intention of the United States, or the government of the Canal Zone, to institute expropriation proceedings against his property; said notice shall be in writing and served upon the owner in person not later than ten days prior to the date on which the commissioners assemble for the purpose of making the appraisalment, or service of said notice may be made by publishing the same in one issue of any two newspapers in general circulation on the Isthmus of Panama on a date not less than twenty days prior to the assembling of said commissioners for the purpose of making said appraisalment. Upon the report of the commission being filed in the office of the governor, he shall transmit a copy thereof to the owner or owners of the property affected thereby, by depositing the same in the mails duly stamped and addressed to his last known place of residence. If such place of residence is on the Isthmus of Panama, the owner shall be entitled to ten days from the date on which the report is filed in the office of the governor in which to accept the amount of compensation and damages fixed by the commission, and to prepare and tender to the governor of the Canal Zone a deed transferring said property to the United States, or the government of the Canal Zone, as the case may be. If the owner, or owners, is not a resident of the Isthmus of Panama, then he shall be allowed forty days for the acceptance of the appraisalment and the execution and tender of the deed.

Upon the delivery of a deed executed in proper form transferring to the United States, or to the government of the Canal Zone, as the case may be, the land sought to be condemned, the governor of the Canal Zone is hereby empowered to authorize the treasurer of the Isthmian Canal Commission to pay to the owner or owners of said land, or their duly authorized agent, the amount fixed and determined by the joint commission as adequate compensation for the land so taken or damaged. In the event that the owner or owners of said land neglect or refuse to execute or deliver a deed transferring the title of said land to the United States, or to the government of the

Salaries and wages.....	5,841.22	7,190.96	13,032.18
Per diem and traveling expenses.....	6.50		5.30
Contingent expenses.....	2,500.00	4,100.50	6,780.50

REPORT OF THE ISTHMIAN CANAL COMMISSION.

197

Canal Zone, as the case may be, within the time fixed as herein prescribed, the governor of the Canal Zone shall transmit the report of the appraisers to the prosecuting attorney of the Canal Zone, who shall thereupon forthwith prepare a petition in condemnation and institute proceedings in a court of competent jurisdiction. Said petition shall set forth the proceedings theretofore had in said matter and shall be verified by the oath of said prosecuting attorney; and the treasurer of the Isthmian Canal Commission shall thereupon withdraw from the public treasury and deposit in said court a sum of money equal to the amount of compensation and damages fixed by the joint commission, and the United States, or the government of the Canal Zone, as the case may be, is hereby authorized thereupon to enter upon and take possession of the property sought to be expropriated and devote the same to the public use. Service of notice of such condemnation proceedings shall be had pursuant to the provisions of law in such cases made and provided, and service being completed, the court, if it shall appear that the proceedings had were in accordance with the provisions of said convention, shall enter final judgment. In such proceeding the action of the joint commission theretofore had shall be conclusive as to the amount of compensation and damages to which the owner is entitled, and the report of said commission shall be accepted and received by the court as conclusive evidence of the facts therein set forth. The cost of the proceedings, including the compensation for the members of the joint commission, shall be paid by the Isthmian Canal Commission from funds available for the construction of the isthmian canal connecting the waters of the Atlantic and Pacific oceans.

A municipality of the Canal Zone, Isthmus of Panama, or any person, association, or public or private corporation authorized to exercise the power of eminent domain shall proceed as follows:

An action shall be instituted against the owner or owners of the property, in the circuit court for the judicial circuit in which the property or any portion thereof sought to be condemned is situated, by filing a complaint in condemnation proceedings. The complaint shall state with certainty the purpose of the exercise of the right of condemnation and describe the property sought to be condemned, and set forth the interest of each defendant separately.

Enacted December 30, 1904.

J. G. WALKER,
Chairman Isthmian Canal Commission.

MUNICIPAL GOVERNMENTS.

[Act No. 22.]

AN ACT to amend act No. 7 of the Isthmian Canal Commission, entitled "An act to provide for the organization of municipal governments in the Canal Zone, Isthmus of Panama."

By authority of the President of the United States, be it enacted by the Isthmian Canal Commission:

That section 28 of act No. 7 of the Isthmian Canal Commission, approved on September 1, 1904, be, and the same hereby is, amended by inserting, as the fifth paragraph of said section, the words:

Per diem and traveling expenses.....	28.61	76.70	145.31
Bureau of architecture and buildings.....			
Salaries and wages.....	245.33	5,799.76	9,676.49
Per diem and traveling expenses.....	11.10	133.50	144.65
Contingent expenses.....		15.00	15.00

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Salaries
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"Fifth. A tax on goods and merchandise consumed within the municipality to be equitably levied by the municipal council on the sale for consumption of commercial commodities."

Enacted January 31, 1905.

J. G. WALKER,
Chairman Isthmian Canal Commission.

[Act No. 23.]

AN ACT to amend sections 30, 32, and 35 of act No. 8, Laws of the Canal Zone, Isthmus of Panama, entitled "An act to provide for the organization of the executive branch of the government of the Canal Zone, Isthmus of Panama."

By authority of the President of the United States, be it enacted by the Isthmian Canal Commission:

SECTION 1. That section 30 of act No. 8, Laws of the Canal Zone, Isthmus of Panama, entitled "An act to provide for the organization of the executive branch of the government of the Canal Zone, Isthmus of Panama," be, and the same is hereby, amended to read as follows:

"SEC. 30. The salary of the collector of revenues shall be thirty-six hundred dollars per annum, payable monthly. During his term of office in the Zone he shall be entitled to quarters."

SEC. 2. That section 32 of said act No. 8, Laws of the Canal Zone, Isthmus of Panama, be, and the same is hereby, amended to read as follows:

SEC. 32. There shall be two deputy collectors of revenues, each of whom shall be ex officio a deputy collector of customs and a deputy collector of internal revenue, and shall enjoy the incumbency and perform the duties of said several offices subject to the conditions and obligations of his bond as deputy collector of revenues. The salary of the deputy collector of revenues shall be eighteen hundred dollars per annum, payable monthly.

SEC. 3. That section 35 of said act No. 8, Laws of the Canal Zone, Isthmus of Panama, be, and the same is hereby, amended to read as follows:

SEC. 35. For the purpose of customs administration in the Canal Zone there is hereby established a customs district, which comprises all the lands and waters within the control and jurisdiction of the United States on the Isthmus of Panama and the maritime waters contiguous to the shores of the said Canal Zone extending to the distance of three marine miles from mean low-water mark, but not including any maritime waters that pertain to the harbors of the cities of Panama and Colon, in the Republic of Panama, the harbors of which are sufficiently defined under the provisional agreement of delimitation signed by the proper representatives of the governments of Panama and of the Canal Zone on the 15th day of June, as modified by the consent of the parties in accordance with the description contained in section 5 of the Executive order of December 3, 1904.

There shall be two ports of entry in the Canal Zone—to wit: Ancon, at the Pacific terminus of the canal, and Cristobal, at the Atlantic terminus, at which goods, wares, and merchandise may be

Machine shops	8,197.45	29,877.67	82,526.12
Salaries and wages	2.80	4.75	27.55
Per diem and traveling expenses	55.50	105.29	165.89
Small tools			

*Prior to April 1 expenses of machine shops were distributed to the division of the work receiving the benefit of the work done by machine shops.

REPORT OF THE ISTHMIAN CANAL COMMISSION. 199

imported or exported, and vessels may be entered or cleared in accordance with the Executive orders of December 3, 1904, and December 6, 1904.

The subdivision of the executive branch of the government of the Canal Zone, known as the department of revenues, shall include the administration of the customs laws and tariff regulations in force in the said Zone. The collector of revenues, who by act of the Isthmian Canal Commission is ex officio the collector of customs, shall receive the salary which may be allowed by law, and shall perform the duties of collector of customs as required by the laws now in force in the Canal Zone or that may hereafter be enacted.

The deputy collectors and inspectors of customs, the health officers, and port captains at the ports of Ancon and Cristobal shall receive such compensation as may be allowed by law, and will perform their duties at said ports as required by the laws and regulations in force in the Zone.

Enacted February 28, 1905.

J. G. WALKER,
Chairman Isthmian Canal Commission.

[Act. No. 24.]

AN ACT providing for an inexpensive method of administration upon the estates of employees of the government of the Canal Zone, or of the Isthmian Canal Commission who are citizens of the United States and who die in the Canal Zone, Isthmus of Panama, leaving estates of small value upon which regular administration is deemed inadvisable.

By authority of the President of the United States, be it enacted by the Isthmian Canal Commission:

SECTION 1. Whenever a citizen of the United States, who is an employee in the service of the Isthmian Canal Commission, or the government of the Canal Zone, or any branch thereof, shall die in the Canal Zone, Isthmus of Panama, leaving an estate in said Zone, or in the Republic of Panama, no part of which is real estate, and the entire assets belonging to said estate are personal property and not exceeding in value the sum of five hundred dollars, and regular administration in accordance with the provisions of law shall not have been instituted in a court of competent jurisdiction of the Canal Zone, the collector of revenues for the Canal Zone, Isthmus of Panama, is authorized, and it is hereby made his duty, to take possession of the estate of such deceased person and to make a complete inventory thereof, and to file the same with the auditor of the Canal Zone, Isthmus of Panama. Upon taking possession of such estate, the collector of revenues shall ascertain, by the best available means, the names and residences of the persons who are lawfully entitled to inherit said estate and receive said property, and shall transmit the same to the persons whom he shall determine to be lawfully entitled thereto, upon receiving proper vouchers therefor. Before transmitting the property of said estate to its lawful owners, the collector of revenues is hereby authorized and directed to pay therefrom the burial expenses of such deceased person and all expenses necessarily incurred in securing possession of the estate and in ascertaining the true owners thereof, and in transmitting the same to the true owners, and in the payment of such debts as he shall determine are justly due

from the deceased at the time of his death; but in addition to the purposes for which said estate may be applied by the collector of revenues, as hereinbefore provided, the collector of revenues is also authorized to pay the expenses of the transportation of the remains to the United States, if such transportation is desired by the surviving relatives, so far as the funds in his hands will enable him to pay such expenses. The accounts of the collector of revenues, in the performance of his duty herein required, shall be audited in the same manner, or as near as is practicable, as his other accounts, and for the moneys and property received by him in the performance of the duties by this act prescribed his official bond shall be held as security. If the collector of revenues shall find it to be for the interest of the parties entitled to the estate to convert any portion thereof which is not in the form of cash into cash by sale, he is hereby authorized to make such sale by auction or otherwise, as he shall determine to be most advantageous to the estate.

In case the deceased at the time of his death shall have to his credit with the Isthmian Canal Commission or the government of the Canal Zone any sum as salary or earned leave of absence, the amount so due shall be paid to the collector of revenues and be by him administered as a part of said estate in the manner prescribed by this act: *Provided*, That if there should be a regular administration upon the estate of the deceased by a court of competent jurisdiction of the Canal Zone, Isthmus of Panama, then the sum due to the deceased as salary, or by reason of earned leave of absence, shall be paid to the regular executor or administrator of the estate appointed by said court.

SEC. 2. In case the collector of revenues shall have performed his duties in accordance with the provisions of this act, and shall have delivered said estate or paid over the sum due from the funds of said estate to the person or persons whom he has determined to be entitled thereto, such settlement of the estate shall be deemed a lawful settlement thereof, and the collector of revenues shall not be accountable and his bond shall not be liable to any other person for the estate so administered by him.

SEC. 3. This act shall apply to the estates of persons of the class named in section 1 who died prior to the passage of this act, as well as to those who die after the date of its enactment.

SEC. 4. Nothing in this act contained shall prohibit the lawful heirs of any person whose estate has been settled in accordance with the provisions of this act from bringing suit in any court having jurisdiction of the subject-matter and of the parties to the action against the person or persons who received the estate by virtue of the provisions of this act, and from recovering the same or the value thereof from such person or persons upon proof that the estate has been delivered to the persons not entitled to receive and retain the same.

SEC. 5. If at any time prior to the transmission to the United States by the collector of revenues of the Canal Zone of the money, funds, or personal effects belonging to said estate it shall be made to appear to the collector of revenues, by duly authenticated copies of letters of administration or letters testamentary, that the deceased left a will which has been filed for probate, or that an administrator for said

Material owned.....	8,868.84	1,800,000.00	1,800,000.00
Floating equipment.....			8,868.84

* Material and supplies purchased and cost of purchase, handling, and transportation of material and supplies are common to the several divisions, offices, and classes of work and are to be distributed to them in equitable proportion.

REPORT OF THE ISTHMIAN CANAL COMMISSION. 201

estate has been appointed by a court of competent jurisdiction in the United States, the collector of revenues for the Canal Zone shall turn over to said administrator or executor, upon execution and delivery of a receipt therefor, all moneys or personal effects belonging to said estate which otherwise, under the provisions of this act, would be turned over to the heirs of said estate.

Enacted March 1, 1905.

J. G. WALKER,
Chairman Isthmian Canal Commission.

EXHIBIT P.

ORDERS ISSUED BY PRECEDING COMMISSION SUBSEQUENT TO LAST ANNUAL REPORT.

OFFICE OF THE ISTHMIAN CANAL COMMISSION,
Washington, D. C., December 30, 1904.

CIRCULAR No. 4,
ISTHMIAN CANAL COMMISSION.

The following order of the Secretary of War is published for the information and guidance of all concerned:

PANAMA, December 3, 1904.

By direction of the President, it was ordered that, subject to the action of the 58th Congress as contemplated by the act of Congress approved April 28, 1904--

SECTION 1. No importation of goods, wares, and merchandise shall be entered at Ancon or Cristobal, the terminal ports of the canal, except such goods, wares, and merchandise as are described in Article XIII of the treaty between the Republic of Panama and the United States, the ratifications of which were exchanged on the 26th day of February, 1904, and except goods, wares, and merchandise in transit across the Isthmus for a destination without the limits of said Isthmus, and except coal and crude mineral oil for fuel purposes to be sold at Ancon or Cristobal to seagoing vessels; said coal and oil to be admitted to those ports free of duties for said purposes:

Provided, however, That this order shall be inoperative, first, unless the Republic of Panama shall reduce the ad valorem duty on imported articles described in class 2 of the act of the national convention of Panama passed July 5, 1904, and taking effect October 12, 1904, from fifteen per centum to ten per centum and shall not increase the rate of duty on the imported articles described in the other schedules of said act, except on all forms of imported wines, liquors, alcohol, and opium, on which the Republic may fix higher rates; second, unless article 38 of the constitution of the Republic of Panama, as modified by article 146 thereof, shall remain in full force and unchanged so far as the importation and sale of all kinds of merchandise are concerned; third, unless the consular fees and charges of the Republic of Panama in respect to entry of all vessels and importations into said ports of Panama and Colon shall be reduced to sixty per cent of the rates now in force; and, fourth, unless goods imported into the ports of Panama and Colon consigned to or destined for any part of the Canal Zone shall not be subjected in the Republic of Panama to any other direct or indirect impost or tax whatever.

Office of the Quarantine Officer.....	\$, 244. 87	\$, 244. 87
Salary and wages.....	180. 79	180. 79
Contingent expenses.....		
Quarantine officer, Panama Quarantine Station.....	686. 67	686. 67
Salary and wages.....	141. 00	141. 00
Transportation.....		

REPORT OF THE ISTHMIAN CANAL COMMISSION.

203

SEC. 2. In view of the proximity of the port of Ancon to the port of Panama and the port of Cristobal to the port of Colon, the proper customs or port official of the Canal Zone shall, when not inconsistent with the interests of the United States, at the instance of the proper authority of the Republic of Panama, permit any vessel entered at or cleared from the ports of Panama and Colon, together with its cargo and passengers, under suitable regulations for the transit of the imported merchandise and passengers to and from the territory of the Republic of Panama, to use and enjoy the dockage and other facilities of the ports of Ancon and Cristobal, respectively, upon payment of proper dockage dues to the owners of said docks:

Provided, however, That reciprocal privileges as to dockage and other facilities at Panama and Colon, together with suitable arrangement for transit of imported merchandise and passengers to and from the territory of the Canal Zone, shall be granted by the authorities of the Republic of Panama, when not inconsistent with its interests, to any vessel, together with its cargo and passengers, entered at or cleared from the ports of Ancon and Cristobal: *Provided, however,* That nothing herein contained shall affect the complete administrative, police, and judicial jurisdiction of the two Governments over their respective ports and harbors, except as hereinafter provided in section 6.

Provided also, That vessels entering or clearing at the port of Panama shall have the absolute right freely to anchor and lade and discharge their cargoes by lighterage from and to Panama at the usual anchorage in the neighborhood of the islands of Perico, Flamenco, Naos, and Culebra, though included in the harbor of Ancon under the provisional delimitation as amended under section 5 hereafter, and to use the said waters of said harbor for all lawful commercial purposes.

SEC. 3. All manifests and invoices and other documents in respect to vessels or cargoes cleared or consigned for or from the ports of Panama and Colon shall, as heretofore, be made by the officials of the Republic of Panama. All manifests, invoices, and other documents in respect to the vessels and cargoes cleared or consigned for or from the ports of Ancon or Cristobal shall be made by officials of the United States.

SEC. 4. No import duties, tolls, or charges of any kind whatsoever shall be imposed by the authorities of the Canal Zone upon goods, wares, and merchandise imported, or upon persons passing from the territory of the Republic of Panama into the Canal Zone, and section 5 of the Executive order of June 24, 1904, providing that duties on importations into the Canal Zone are to be levied in conformity with such duties as Congress has imposed upon foreign merchandise imported into ports of the United States, is hereby revoked; but this order shall be inoperative unless the authorities of the Republic of Panama shall grant by proper order reciprocal free importations of goods, wares, and merchandise and free passage of persons from the territory of the Canal Zone into that of the Republic of Panama.

SEC. 5. The provisions of this order also shall not be operative except upon the condition that the delimitation of the cities and harbors of Colon and Panama, signed on the 15th day of June, 1904, by the proper representatives of the governments of the Republic of Panama and of the Canal Zone, shall be provisionally enforced, and while the

same shall remain in force with the consent of both parties thereto the provisional delimitation shall include not only the terms set forth in the writing thereof, but also the following, viz: That the harbor of Panama shall include the maritime waters in front of said city to the south and east thereof, extending three marine miles from mean low-water mark, except the maritime waters lying westerly of a line drawn from a stake or post set on Punta Mala through the middle island of the three islands known as *Las Tres Hermanas*, and extending three marine miles from mean low-water mark on Punta Mala, which waters shall be considered in the harbor of Ancon.

SEC. 6. This order also shall be inoperative unless the proper governmental authorities of the Republic of Panama shall grant power to the authorities of the Canal Zone to exercise immediate and complete jurisdiction in matters of sanitation and quarantine in the maritime waters of the ports of Panama and Colon.

SEC. 7. The Executive order of June 24, 1904, concerning the establishment of post-offices and postal service in the Canal Zone is modified and supplemented by the following provisions:

All mail matter carried in the territory of the Canal Zone to or through the Republic of Panama to the United States and to foreign countries shall bear the stamps of the Republic of Panama properly crossed by a printed mark of the Canal Zone government, and at rates the same as those imposed by the Government of the United States upon its domestic and foreign mail matter, exactly as if the United States and the Republic of Panama for this purpose were common territory. The authorities of the Canal Zone shall purchase from the Republic of Panama such stamps as the authorities of the Canal Zone desire to use in the Canal Zone at forty per centum of their face value; but this order shall be inoperative unless the proper authorities of the Republic of Panama shall by suitable arrangement with the postal authorities of the United States provide for the transportation of mail matter between post-offices on the Isthmus of Panama and post-offices in the United States at the same rates as are now charged for domestic postage in the United States, except all mail matter lawfully franked and inclosed in the so-called penalty envelopes of the United States Government concerning the public business of the United States, which shall be carried free, both by the governments of Panama and of the Canal Zone: *Provided, however,* That the Zone authorities may, for the purpose of facilitating the transportation of through mail between the Zone and the United States in either direction, inclose such through mail properly stamped or lawfully franked in sealed mail pouches, which shall not be opened by the authorities of the Republic of Panama in transit, on condition that the cost of transportation of such mail pouches shall be paid by the Zone government.

SEC. 8. This order also shall not be operative unless the currency agreement made at Washington June 20, 1904, by the representatives of the Republic of Panama and the Secretary of War of the United States, acting with the approval of the President of the United States, for the establishment of a gold standard of value in the Republic of Panama and proper coinage shall be approved and put into execution by the President of the Republic of Panama, pursuant to the authority conferred upon him by law of the Republic of Panama, No. 24, approved June 20, 1904, and unless the President of

Transportation of material.....	678.00	1,000.00	678.00
Repairs to equipment.....	100.00	100.00	100.00
Contingent expenses.....	8,100.01	1,000.00	9,100.01

REPORT OF THE ISTHMIAN CANAL COMMISSION.

205

the Republic of Panama, in order that the operation of the said currency agreement in securing and maintaining a gold standard of value in the Republic of Panama may not be obstructed thereby, shall by virtue of his authority conferred by law No. 65, enacted by the National Assembly of Panama on June 6, 1904, abolish the tax of one per cent on gold coin exported from the Republic of Panama.

SEC. 9. Citizens of the Republic of Panama at any time residing in the Canal Zone shall have, so far as concerns the United States, entire freedom of voting at elections held in the Republic of Panama and its provinces or municipalities at such places outside of the Canal Zone as may be fixed by the Republic and under such conditions as the Republic may determine; but nothing herein is to be construed as intending to limit the power of the Republic to exclude or restrict the right of such citizens to vote as it may be deemed judicious.

SEC. 10. The highway extending from the eastern limits of the city of Panama, as fixed in the above-mentioned provisional delimitation agreement of June 10, 1904, to the point still further to the eastward where the road to the "Savannas" crosses the Zone line (which is 5 miles to eastward of the center axis of the canal) shall be repaired and maintained in a servicable condition at the cost and expense of the authorities of the Canal Zone, and also in like manner the said road from the said eastern limits of the city of Panama to the railroad bridge in the city of Panama shall be repaired at the cost of the authorities of the Canal Zone; but this order shall not be operative unless the Republic of Panama shall waive its claim for compensation for the use in perpetuity of the municipal buildings located in the Canal Zone.

SEC. 11. The United States will construct, maintain, and conduct a hospital or hospitals either in the Canal Zone or in the territory of the Republic, at its option, for the treatment of persons insane or afflicted with the disease of leprosy, and indigent sick, and the United States will accept for treatment therein such persons of said classes as the Republic may request; but this order shall not be operative unless, first, the Republic of Panama shall furnish without cost the requisite lands for said purposes if the United States shall locate such hospital or hospitals in the territory of the Republic, and, second, unless the Republic shall contribute and pay to the United States a reasonable daily per capita charge in respect of each patient entering, upon the request of the Republic, to be fixed by the Secretary of War of the United States.

SEC. 12. The operation of this Executive order and its enforcement by officials of the United States on the one hand, or a compliance with and performance of the conditions of its operation by the Republic of Panama and its officials on the other, shall not be taken as a delimitation, definition, restriction, or restrictive construction of the rights of either party under the treaty between the United States and the Republic of Panama.

This order is to take effect on the 12th day of December, 1904.

WM. H. TAFT,
Secretary of War.

This order will be duly published and enforced.

J. G. WALKER,
Chairman Isthmian Canal Commission.

WASHINGTON, D. C., December 30, 1904.

CIRCULAR No. 5,
ISTHMIAN CANAL COMMISSION.

The following order of the Secretary of War is published for the information and guidance of all concerned:

PANAMA, December 6, 1904.

[Executive order of December 6, 1904, explanatory of Executive order of December 3, 1904.]

SECTION 1. Consignments of goods, wares, and merchandise which by virtue of section 1 of the above-mentioned order of December 3, 1904, can not be entered for importation at the ports of Ancon or Cristobal may nevertheless, at the option of the consignor, if accompanied by the proper consular invoices of the consul of the Republic of Panama at the port of consignment, be landed at Ancon or Cristobal, respectively, in transit to any part of the Canal Zone or the Republic upon payment of the proper duties to the Republic of Panama, under suitable arrangements similar to those provided for by section 2 of said order of December 3, 1904.

But such goods, wares, and merchandise not accompanied by consular invoice of the consul of the Republic shall not be permitted to land at Ancon or Cristobal.

SEC. 2. The order of December 3, 1904, shall be construed to permit free exportation and consignment of goods, wares, and merchandise and free transit of persons and vehicles from the Republic through the Canal Zone and from the terminal ports thereof.

By direction of the President:

WM. H. TAFT,
Secretary of War.

This order will be duly published and enforced.

J. G. WALKER,
Chairman Isthmian Canal Commission.

WASHINGTON, D. C., December 30, 1904.

CIRCULAR No. 6,
ISTHMIAN CANAL COMMISSION.

The following order of the Secretary of War is published for the information and guidance of all concerned:

WAR DEPARTMENT,
Washington, December 16, 1904.

To the Chairman of the Isthmian Canal Commission:

By direction of the President, the order of June 24, 1904, relating to the establishment and administration of the customs service in the Canal Zone of the Isthmus of Panama, is hereby revoked.

WM. H. TAFT,
Secretary of War.

This order will be duly published and enforced.

J. G. WALKER,
Chairman Isthmian Canal Commission.

WASHINGTON, D. C., December 30, 1904.

CIRCULAR No. 7,
ISTHMIAN CANAL COMMISSION.

The following order of the Secretary of War is published for the information and guidance of all concerned:

WAR DEPARTMENT, December 28, 1904.

SIR: By direction of the President, it is ordered that there shall be substituted for the order of June 24, 1904, relating to the establishment and administration of the customs service in the Canal Zone of the Isthmus of Panama, which was revoked by the order of December 16, 1904, the following:

"SECTION 1. For the purpose of customs administration in the Canal Zone there is hereby established a customs district, which comprises all the lands and waters within the control and jurisdiction of the United States on the Isthmus of Panama and the maritime waters contiguous to the shores of the said Canal Zone extending to the distance of three marine miles from mean low-water mark, but not including any maritime waters that pertain to the harbors of the cities of Panama and Colon, in the Republic of Panama, the harbors of which are sufficiently defined under the provisional agreement of delimitation signed by the proper representatives of the governments of Panama and the Canal Zone on the 15th day of June, as modified by the consent of the parties in accordance with the description contained in section 5 of the Executive order of December 3, 1904.

"SEC. 2. There shall be two ports of entry in the Canal Zone, to wit, Ancon, at the Pacific terminus of the canal, and Cristobal, at the Atlantic terminus, at which goods, wares, and merchandise may be imported or exported and vessels may be entered or cleared in accordance with Executive orders of December 3, 1904, and December 6, 1904.

"SEC. 3. The subdivision of the executive branch of the government of the Canal Zone known as the department of revenues shall include the administration of the customs laws and tariff regulations in force in the said Zone. The collector of revenues, who, by act of the Isthmian Canal Commission, is *ex officio* the collector of customs, shall receive the salary which may be allowed by law, and shall perform the duties of collector of customs as required by the laws now in force in the Canal Zone or that may hereafter be enacted.

"SEC. 4. The deputy collectors and inspectors of customs, the health officers, and port captains at the ports of Ancon and Cristobal shall receive such compensation as may be allowed by law, and will perform their duties at said ports as required by the laws and regulations in force in the Zone.

"SEC. 5. The order of December 16, 1904, revoking the order of June 24, 1904, together with this order, shall be proclaimed in the Canal Zone, Isthmus of Panama, and shall be in force from the date of the promulgation."

Very respectfully,

WM. H. TAFT,
Secretary of War.

THE CHAIRMAN OF THE ISTHMIAN CANAL COMMISSION,
Washington, D. C.

This order will be duly published and enforced.

J. G. WALKER,
Chairman Isthmian Canal Commission.

OFFICE OF THE ISTHMIAN CANAL COMMISSION,
Washington, D. C., January 10, 1905.

CIRCULAR No. 8,
ISTHMIAN CANAL COMMISSION.

The following order of the Secretary of War is published for the information and guidance of all concerned:

[Executive order.]

WAR DEPARTMENT,
Washington, D. C., January 7, 1905.

By direction of the President, it is hereby ordered that—

1. To entitle goods, wares, and merchandise to entry at Ancon and Cristobal, the terminal ports of the isthmian canal, Canal Zone, Isthmus of Panama, it is necessary that it be established by the certificate of a member of the Isthmian Canal Commission, or of the chief engineer of the Isthmian Canal Commission, or of the chief of the department of material and supplies, that said goods, wares, and merchandise are necessary and convenient for the construction of the isthmian canal or for the use and consumption of certain officers and employees in the service of the United States and of the government of the Canal Zone and their families, stationed on the Isthmus of Panama, and are to be devoted to that purpose exclusively.

2. The certificate above required shall be granted only when the goods, wares, and merchandise to be certified are (1) the property, including live stock and forage, of or under contract of purchase by the United States and intended for use in the work of constructing the canal or the sanitation of the Isthmus, or for the service of the government of the Canal Zone; (2) the property, including live stock and forage, of or under contract of purchase by a contractor with the United States or the government of the Canal Zone for work on the construction of the Isthmian Canal, the sanitation of the Isthmus of Panama, provided that any goods, wares, or merchandise that are to be offered for sale by any contractor to his employees or otherwise shall not be entitled to such entry; (3) the property of the government of the Canal Zone or of any municipality of said Zone; (4) property and provisions intended for sale in commissaries established and operated by the Isthmian Canal Commission to officers, employees, and contractors of the Isthmian Canal Commission, of the Panama Railroad Company, or of any contractor with the Isthmian Canal Commission for work on the Isthmus (together with the families of such person), who are citizens of the United States or who receive compensation on what is known as the gold pay roll of the Commission, of the railroad company, or such contractor; (5) household furniture of such officers and employees of the Isthmian Canal Commission stationed in the Canal Zone or Republic of Panama, including such articles, effects, and furnishings as pictures, books, musical instruments, chinaware, bed and table linen, and kitchen utensils; also wearing apparel, toilet objects, and articles for personal use; books, portable tools and instruments, jewelry, and table services in quantities and of the class suitable to the rank and

REPORT OF THE ISTHMIAN CANAL COMMISSION.

209

position of such officers and employees, and intended for their own use and benefit and not for barter or sale, imported from the United States.

3. This order contemplates the exclusion from benefits of the commissaries established and maintained by the Commission of all employees and workmen who are natives of tropical countries wherein prevail climatic conditions similar to those prevailing on the Isthmus of Panama, and who therefore may be presumed to be able to secure the articles of food, clothing, household goods and furnishings of the kind and character to which they are accustomed from the merchants of Panama, Colon, and the towns of the Canal Zone, and whose ordinary needs may be supplied without recourse to the Government commissaries. Should it develop hereafter that said merchants charge prices in excess of legitimate profit, or practice other extortion, the United States, for the protection and assistance of all its employees, whether from the Tropical or Temperate Zone, will supply its commissaries with such staple articles as are required and desired by the inhabitants of tropical countries, and permit all its employees and workmen and those of its contractors to avail themselves of the benefits and privileges afforded by said Government commissaries.

This order is to take effect on the 7th day of January, 1905.

WM. H. TAFT,
Secretary of War.

The CHAIRMAN OF THE ISTHMIAN CANAL COMMISSION,
Washington, D. C.

This order will be duly published and enforced.

J. G. WALKER,
Chairman Isthmian Canal Commission.

OFFICE OF THE ISTHMIAN CANAL COMMISSION,
Washington, D. C., January 16, 1905.

CIRCULAR No. 9,
ISTHMIAN CANAL COMMISSION.

The following Executive order is published for the information and guidance of all concerned:

[Executive order.]

It is ordered that Joseph L. Bristow, of Kansas, be appointed a special commissioner for the purpose of visiting the ports of the Pacific coast, the Isthmus of Panama, New York, and such other ports as may be necessary, to make an investigation into the present trade conditions and freight rates between the Atlantic and Pacific coasts, across the Isthmus of Panama, and between the west coast of South America and the east coast of the United States, and Europe, for the purpose of determining the best policy to be pursued in the management of the Panama Railroad Company.

He is authorized to employ for this purpose a stenographer at not exceeding \$5.00 a day and his actual and necessary expenses, and to

take evidence of all persons whose knowledge of trade conditions or rates will assist in reaching the necessary conclusion.

The Secretary of War will furnish to the special commissioner a letter of instruction, in detail, as to the course and extent of his investigations and as to the time when he shall report his conclusions.

Until his report is forthcoming the commissioner will be allowed his actual expenses and \$15.00 a day. The President will finally fix his entire compensation. As Mr. Bristow will need until January 20, 1905, to close up matters awaiting his disposition as Fourth Assistant Postmaster-General, this order will take effect on that date. The Isthmian Canal Commission is directed to provide the funds needed in the execution of this order.

THEODORE ROOSEVELT.

THE WHITE HOUSE, *January 13, 1905.*

This order will be duly published and enforced.

J. G. WALKER,
Chairman Isthmian Canal Commission.

OFFICE OF THE ISTHMIAN CANAL COMMISSION,
Washington, D. C., January 20, 1905.

CIRCULAR NO. 10,
ISTHMIAN CANAL COMMISSION.

The following Executive order is published for the information and guidance of all concerned:

[Executive order.]

By order of the President, Thomas T. Gaff, of Washington, D. C., and Dr. C. A. L. Reed, of Cincinnati, Ohio, are hereby appointed as members of the joint commission provided for by Articles VI and XV of the canal convention of February 26, 1904.

They will visit Ancon, in the Panama Zone, and make their presence known to the governor of the Zone on or before the seventh of February.

They will receive the actual expenses of traveling and subsistence from the time of leaving their places of residence until their return, and also an allowance of ten dollars a day for their services.

WM. H. TAFT,
Secretary of War.

WAR DEPARTMENT,
Washington, D. C. January 17, 1905.

This order will be duly published and enforced.

J. G. WALKER,
Chairman Isthmian Canal Commission.

REPORT OF THE ISTHMIAN CANAL COMMISSION. 211

OFFICE OF THE ISTHMIAN CANAL COMMISSION,
Washington, D. C., February 13, 1905.

CIRCULAR No. 11,
ISTHMIAN CANAL COMMISSION.

The following order is published for the information and guidance of all concerned:

SPECIAL ORDERS,
No. 20.

WAR DEPARTMENT,
Washington, January 25, 1905.

[Extract.]

* * * * *
6. By direction of the President, Capt. Hugh J. Gallagher, General Staff, is detailed for duty with the Isthmian Canal Commission, and will report to the chairman of that Commission for duty accordingly. [968712, M. S. O.]
* * * * *

By order of the Secretary of War:

ADNA R. CHAFFEE,
Lieutenant-General, Chief of Staff.

Official:

F. C. AINSWORTH,
The Military Secretary.

This order will be duly published and enforced, and Major Gallagher is assigned as purchasing and shipping agent of the Isthmian Canal Commission, with station at Washington, D. C.

J. G. WALKER,
Chairman Isthmian Canal Commission.

[Circular No. 12.]

THE ISTHMIAN CANAL COMMISSION,
Washington, D. C., March 1, 1905.

TRAVELING EXPENSES.

1. The following regulations concerning traveling expenses of officers and employees of the Commission are published for the information and guidance of all concerned. They do not refer to travel upon the Isthmus of Panama by officers and employees stationed upon the Isthmus unless such travel is at the beginning or at the termination of a journey extending beyond the Isthmus.

2. Before incurring any expense (for which payment by the United States is to be claimed), in traveling upon the business of the Commission, an officer or employee must procure from the proper officer an order in writing which shall specify the duty assigned and the travel to be performed as specifically as circumstances will permit. This shall be signed by the chairman of the Commission, except that for travel of officers and employees stationed on the Isthmus the order

may be signed by the member of the Commission acting as governor of the Canal Zone. When an officer or employee is at a distance from the officers authorized to sign travel orders, and the necessity for immediate travel will not permit of the delay necessary to procure an order, or when other conditions render it impracticable to obtain an order without serious injury to the public interests, he may proceed without such an order, reporting at once in writing to the head of his department the necessity for the travel without orders.

3. All travel must be by the shortest practicable routes, unless otherwise directed by the travel order, and must be without unnecessary delays. Proper and legitimate travel expenses include such as are usual and essential to the comfort of travelers, and may embrace any of the following items:

(a) First-class fares on railroads, steamships, or other public conveyances, and hire of special transportation where there is no regular means of conveyance. Charges for meals will not be allowed if the transportation charge includes meals. "Excess-baggage" charges must be explained, and to be allowed must be for the weight of official papers or public property carried with the officer or employee.

(b) Street-car, omnibus, or transfer-coach fare between stations, docks, and hotels, and, when there are no such conveyances available, moderate and necessary hack or cab hire, not exceeding the usual and legal rates, and transfer of baggage. Street-car fare, while on official business during the time spent in a city, will be allowed, but the necessity for employing a more expensive means of conveyance must be explained in the account for consideration of the Commission.

(c) Sleeping-car fares for one double berth, parlor-car seat, and fare for usual stateroom accommodations on vessels; also fees to porters on sleeping and parlor cars, not exceeding twenty-five cents in one day, and reasonable fees to porters for handling baggage at stations, etc., when necessary.

(d) Charges for meals and lodging not exceeding five dollars for any twenty-four hours, whether meals are taken *en route* or at hotels and restaurants, and reasonable fees to waiters, not exceeding forty cents a day. When travel is by ocean steamer, reasonable fees to stewards, in the aggregate not exceeding an average of seventy-five cents for each twenty-four hours or fraction thereof, will be allowed.

(e) Receipted bills for hotel expenses, showing the dates of entertainment, must be furnished; also receipts for any expense exceeding one dollar, except that receipts are not required for transportation by railroad or vessel, for single meals or for fees to porters, waiters, and stewards. The cost of each meal should be stated.

4. Accounts for traveling expenses will be rendered in triplicate on forms of vouchers approved by the Commission. Such vouchers shall be certified to by the officer or employee who performs the travel, and the vouchers, with the *original* order for travel and all necessary explanatory statements in writing, shall be transmitted to the auditor of the Isthmian Canal Commission at Washington, D. C., for audit. When the travel is made without a written order in advance, a letter of approval from the proper officer authorized to order such travel, specifically approving the travel, shall be procured, and, with the report made by the traveler showing the necessity for proceeding without a written order, shall be transmitted with the

vouchers; or, if the travel is not approved, a statement in writing, with reasons for disapproval, shall be furnished. After the auditor has submitted the vouchers to the chairman of the Commission for his approval, he shall forward the original and duplicate to the proper pay officer for payment of such amount as shall be so approved.

5. No officer or employee traveling under orders shall pay for transportation on a railroad, steamer, or other conveyance operated by the Panama Railroad Company, but shall use an order for transportation furnished by the chairman or the secretary of the Commission at Washington, or by the chief of the material and supply department on the Isthmus. An order for transportation shall also be issued, when practicable, for travel by any steamship line between ports on the Isthmus and ports in the United States or other countries. The accounts of the transportation companies will be settled through the Washington office.

6. These regulations shall not apply in any instance where by law or by the action of the Commission a per diem allowance for any items of expense is fixed for any officer or employe, but shall be superseded as to the expenses which may be stated to be included in the per diem allowance.

7. The limitations of these regulations shall not apply to the heads of the department of engineering, the department of material and supplies, the treasury department, the legal department, and the auditing department. Such officers shall obtain the approval of the Commission before traveling beyond the Isthmus upon official business.

These regulations will be effective from and after March 15, 1905.

J. G. WALKER,
Chairman of Commission.

EXHIBIT Q.

RESOLUTIONS OF THE PRECEDING COMMISSION SUBSEQUENT TO LAST ANNUAL REPORT.

PROCEEDINGS OF THE ISTHMIAN CANAL COMMISSION.

SIXTY-FIRST MEETING.

BOARD ROOM, PANAMA RAILROAD COMPANY,
New York, December 8, 1904.

The Commission met at 10 a. m.

Present: Acting Chairman Grunsky, Messrs. Parsons, Burr, and Harrod, acting secretary.

Absent: Admiral Walker and General Davis, both on duty on the Isthmus of Panama.

The minutes of the meeting of November 30 were read and approved.

The following list of appointments was submitted and approved:

SANITARY STAFF.

Name.	Position.	Date of appointment	Rate of pay.
MacLereth, Adelaide.....	Trained nurse	Dec. 2, 1904	\$50 per month.
Phillips, Elinor S	do	do	Do.
King, Ella B	do	do	Do.
Russell, Genevieve.....	do	do	Do.
Rogers, Cassie L	do	do	Do.
Gleason, Mary	do	do	Do.

ENGINEERING STAFF.

Holmes, Nicholas H.....	Supervisor of construction	Dec. 3, 1904	\$150 per month.
Cummins, E. C	Master mechanic	Dec. 5, 1904	\$200 per month.

The question of marine insurance on supplies to be delivered on the Isthmus by contractors or others was considered. It was referred to the executive committee for report, with the understanding that, in the meantime, the present practice of insuring should be continued.

The chairman reported that much satisfactory progress had been made in arrangements with the Civil Service Commission, and that their rules were now being applied to appointments. Some details are still under consideration.

A communication was received from the traffic manager of the Panama Railroad Company concerning the responsibility for wharfage charges at Panama on lumber shipped by the Kosmos Line. The

Commission considers that the contract for the delivery of the lumber includes these charges.

A communication was submitted from Messrs. C. W. Crane & Co., concerning wharfage charges on cement shipped by schooner to Colon. It was decided to inform the shipper that such charges must be paid by him at Colon, but that they could be avoided by landing at Cristobal, where a depth of water of 15 feet is available.

A communication was received from the Panama Railroad Company concerning the securing of the right of exclusive use of the wharf of the Pacific Mail Steamship Company at Colon until June, 1907, on condition of its repair at a cost of about \$25,000. The matter was referred to the executive committee for report.

The purchase of a safe from the lowest bidder by the treasurer of the Commission, after propositions obtained in open market, was authorized.

The correspondence received by the last isthmian mail was submitted and the following action taken:

A requisition from the engineering department, mainly for tools for the Bas Matachin sheps, and amounting to about \$30,000, was approved.

The use of the burial plot belonging to the Commission in the city of Panama on the terms contained in a letter from Governor Davis is recommended.

The action of Governor Davis in allowing commutation of quarters to employees other than those to whom it is specifically allowed by resolution i. e., to employees of the engineering department, and to those of the Zone receiving less than \$1,000 salary, was approved with authority to continue such allowance.

In the matter of the transmission by Governor Davis of a letter from Colonel Gorgas, requesting the appointment of a property clerk at \$1,200, it was stated that a request had been sent to the Civil Service Commission for a list of names from which this employee could be selected.

The recommendation of Governor Davis that the payment of the traveling expenses of Mr. Parker of \$22.85, incurred while en route from the Philippines, was approved.

Also his action in making a direct purchase of 500 pounds of insect powder in the open market.

The communication from Governor Davis concerning electric lighting was referred to the executive committee for report.

The matter of inspection of medical supplies, in a letter from Governor Davis, was referred to the committee on sanitation for report.

The microscopes called for by Colonel Gorgas through Governor Davis are in bids which were opened on December 1, and an early award and shipment may be expected.

The assignment of Doctor Lyster as surgeon for diseases of the eye, ear, nose, and throat having been referred to the sanitary committee, was reported by them unfavorably. The report was adopted by the Commission.

A letter from Governor Davis concerning the noncompliance with sanitary regulations by the British ship *Columbia* was read for information.

Requisition No. 174-A for miscellaneous materials and supplies was approved.

A letter from the chief engineer concerning investigations at the terminals of the canal was referred to the committee on engineering plans.

The letter of the chief engineer reporting the urgent need for quarters for white employees at Culebra by a building accommodating 100, at a cost of \$30,000, was favorably considered and immediate action authorized.

The chief engineer's report for the appointment of six miners was approved. Applicants on the Commission's list were written to, and in case of their failure to accept, advertisement by the Civil Service Commission will be made.

The appointment of Mr. Hand as foreman, as requested by the chief engineer, was, with the consent of the Civil Service Commission, approved. No reply has yet been received from Mr. Hand.

Requisition No. 174-A from the chief engineer for air-brake material was approved.

His request for information concerning bids, awards, and contracts was approved and referred to the secretary.

The same disposition was made of his request concerning other supplies called for.

His request for four steam-shovel crews before January 1 was approved and proper steps were directed to be taken to secure them.

Steps are being taken to fill his request for the appointment of certain machinists at 45 cents per hour.

The appointment of Mr. Hassman as supervisor at \$150 per month was, with the concurrence of the Civil Service Commission, approved, and the secretary has written to Mr. Hassman.

The same action was taken in the case of Mr. Cummins, master mechanic, at \$200 per month, for the Bas Matachin shops.

Also of Mr. Terrell, as supervisor at Culebra, at \$150 per month.

Mr. Beales has declined the appointment of clerk at \$125 per month, recommended by the chief engineer.

The request of the chief engineer for four stenographers at \$125 per month, six at \$100, and four clerks at \$100 was approved and is receiving the attention of the secretary.

Mr. Griswold, whose appointment as clerk at \$125 was requested by the chief engineer, has declined.

Steps are being taken to secure the bridge and building foremen whose appointments were called for by the chief engineer.

The absence of invoices for materials shipped, complained of by the acting chief of material and supplies, was referred to the executive committee for action.

The progress report of the chief engineer for October was laid before the Commission.

Communication has been had with Mr. Shackelford concerning the request of the chief engineer for his appointment as clerk, Class III.

Mr. Stansbury, whose appointment as property clerk, requested by Colonel Gorgas through Governor Davis, is not available for appointment, and the Civil Service Commission has been requested to fill the position.

The information from the chief engineer concerning the employees earliest and most urgently needed was referred to the Civil Service Commission.

REPORT OF THE ISTHMIAN CANAL COMMISSION.

217

The sanitary committee reported favorably on the recommendation of an increase of the pay of cooks in the Ancon Hospital contained in a letter from Governor Davis, and the Commission, on resolution, adopted the recommendation of the committee, the rates of pay thus fixed being as follows:

	Per annum.
1 chief cook.....	\$900
1 first assistant cook.....	720
1 assistant cook.....	480
3 assistant cooks.....	360

A letter from Governor Davis concerning the application of James M. D. Sheridan for employment was referred to the chairman.

Correspondence from Governor Davis with the Sisters of St. Vincent de Paul serving in the Commission's hospitals giving notice, as per agreement with the sister superior, of the termination of their relations, was read. His action was approved.

The correspondence concerning the claim of Hawkins Taylor, stenographer, for pay while on leave of absence, was, after consideration, referred to the general counsel of the Commission.

The bids of the Lidgerwood Manufacturing Company for three train unloaders and "Hercules" wire cables for \$14,210 f. o. b. New York, and of the Marion Steam Shovel Company for three unloading plows for \$2,205 f. o. b. Marion, Ohio, were accepted.

The bid of O. F. Jordan, of Chicago, Ill., for three earth spreaders for \$3,833 each f. o. b. Harvey, Ill., was accepted.

The following report was submitted by Mr. Parsons, chairman of the executive committee:

The executive committee reports that for the conduct of the affairs of the Commission during the coming year it recommends that the committee on engineering shall proceed to the Isthmus on or about the middle of January to see that the necessary surveys and data for determining the type of the canal have been completed and to bring the same to Washington to be laid before the Commission; and that the committee on engineering plans shall, if possible, recommend to the Commission during March various plans and estimates for the several types of canal, so that the Commission as a whole may determine the same.

That the committee on legislation shall arrange to proceed to the Isthmus on or about the middle of April, to remain there so long as may be necessary, or until June, when it shall be relieved by the other committees on sanitation, executive committee, and finance, in such order as may be hereafter determined, in order that so far as practicable there shall be a continuous representation of the Commission by the governor and two other members during the year (under the general plan of the committees adopted by the Commission, the governor being a member of each committee while the same is on the Isthmus).

It was resolved, on motion of Mr. Burr—

That the report of the committee be adopted, and that the committee on engineering be prepared to carry out the instructions of the board and proceed to the Isthmus on or about the middle of January.

The report of the secretary of the Commission concerning the organization of the office in Washington, with suggestions, was discussed and referred to the executive committee for report.

The chairman announced the agreement of the Panama Railroad Company to the transfer to the Commission of the company's hospital at Colon and the lease of certain grounds adjacent thereto, substantially as shown in a blueprint submitted, and also to the transfer of the commissary of the Panama Railroad Company and to the

termination of the lease to the railroad company of the shops at La Boca belonging to the Commission. The terms of these transfers are set forth in the reports and correspondence submitted to the meeting.

Mr. E. C. Tobey, chief of the department of material and supplies, was directed to act for the Commission with Col. J. R. Shaler, on the part of the Panama Railroad Company, in the appraisal of stock in the transfer of the commissary of the railroad company and of the claims of the same company on the annulment of the lease of the La Boca shops and gridiron.

The Commission then adjourned to meet in Washington on Tuesday, December 13, at 10 a. m.

SIXTY-SECOND MEETING.

EVENING STAR BUILDING,
Washington, D. C., December 13, 1904.

The Commission met in regular session at 10.30 o'clock a. m.

Present: Acting Chairman Grunsky, Messrs. Parsons, Burr, and Harrod.

Absent: Admiral Walker, now en route from the Isthmus of Panama, and Governor Davis, on duty on the Isthmus.

The minutes of the meeting of December 8 were read and approved.

The following appointments, made since the meeting of December 8, 1904, were read:

SANITARY DEPARTMENT.

Name.	Position.	Date of appointment.	Rate of pay.
Bell, Eckle S	Sanitary inspector.....	Dec. 8, 1904	\$100 per month.

ENGINEERING DEPARTMENT.

Shackelford, Chas	Clerk, Class 3.....	Dec. 20, 1904	\$125 per month.
Terrell, C. N.....	Supervisor transportation division.	.....do.....	\$150 per month.
Hand, E. K.....	General foreman	Dec. 16, 1904	\$125 per month.

STEAM-SHOVEL MEN.

Trihey, Thomas E.....	Engineer	Dec. 13, 1904	\$190 per calendar month and \$1 extra for each 1,000 cubic yards of excavated material loaded by shovel in his charge during 1 calendar month in excess of 25,000.
Gray, C. H.....	.....do	Dec. 20, 1904	\$190 per calendar month and extra, as above.
Bodette, Wm.....	.....do .....	.....do.....	Do.
Meehan, John J.....	Craneman	Dec. 13, 1904	\$165 per calendar month and extra, as above.
Myers, Wm. A.....	Pitman .....	.....do.....	\$75 per month.
Krause, Samuel.....	.....do	Dec. 20, 1904	Do.
Kirk, Joe. S.....	Fireman	Dec. 13, 1904	Do.
Buchan, Geo.....	.....do	Dec. 20, 1904	Do.
Daly, Henry E.....	Carpenter	Dec. 13, 1904	\$100 per month.
Greiner, Jno. F.....	Machinist	Jan. 10, 1905	45 cents per hour.

REPORT OF THE ISTHMIAN CANAL COMMISSION. 219

Governor Davis reported the following appointments of officials of the municipalities of the Canal Zone:

ANCON.

Name.	Position.	Appointment for period.	Monthly salary U. S. currency.
Neira, A. Rafael.....	Mayor.....	Nov. 1, 1904, to Jan. 8, 1906.....	\$60.00
Bruno, Valentin E.....	Treasurer-secretary ..	do.....	50.00
Driscoll, George.....	Councilman.....	Nov. 8, 1904, to Jan. 7, 1907.....	None.
Rodriguez, Jose A.....	do.....	do.....	None.
Isma, Manuel S.....	do.....	do.....	None.
Hunt, J. St. Clair.....	do.....	Nov. 8, 1904, to Jan. 8, 1906.....	None.
McFarlane, J.....	do.....	Nov. 16, 1904, to Jan. 8, 1906.....	None.

EMPERADOR.

Garzon, M. E.....	Mayor.....	Nov. 1, 1904, to Jan. 8, 1906.....	\$60.00
Carrillo, Dario E.....	Treasurer-secretary ..	do.....	50.00
Sayavedra, Luis J.....	Councilman.....	Nov. 8, 1904, to Jan. 8, 1906.....	None.
Ovalle, P. Angel.....	do.....	do.....	None.
Lawrence, Antonio.....	do.....	Nov. 8, 1904, to Jan. 7, 1907.....	None.
Prados, Victor.....	do.....	do.....	None.

GORGONA.

Paredes, Tulco.....	Mayor.....	Nov. 1, 1904, to Jan. 8, 1906.....	\$60.00
Diaz, J. M.....	Treasurer-secretary ..	Nov. 16, 1904, to Jan. 8, 1906.....	40.00
Jolly, Gabriel.....	Councilman.....	Nov. 8, 1904, to Jan. 7, 1907.....	None.
Saravia, Manuel.....	do.....	Nov. 8, 1904, to Jan. 8, 1906.....	None.
Palma, Jose.....	do.....	Nov. 8, 1904, to Jan. 7, 1907.....	None.
Doraty, Lazaro.....	do.....	do.....	None.

BUENA VISTA.

Ayarsa, A. R.....	Mayor.....	Nov. 1, 1904, to Jan. 8, 1906.....	\$60.00
Guerrero, Luis R.....	Treasurer-secretary ..	Nov. 21, 1904, to Jan. 8, 1906.....	40.00
Lehun, Eugenio.....	Councilman.....	Nov. 8, 1904, to Jan. 7, 1907.....	None.
DuBarry, Cecilio.....	do.....	do.....	None.
Jones, Thomas.....	do.....	Nov. 8, 1904, to Jan. 8, 1906.....	None.
Garcia, Angel.....	do.....	Nov. 8, 1904, to Jan. 7, 1907.....	None.

CRISTOBAL.

De la Guardia, Juan N.....	Mayor.....	Nov. 1, 1904, to Jan. 8, 1906.....	\$60.00
Rerdell, M. C.....	Treasurer-secretary ..	do.....	100.00
Ami, C. Alejandro.....	Councilman.....	Nov. 16, 1904, to Jan. 7, 1907.....	None.
Areia, Ruben.....	do.....	do.....	None.
Dale, Stephen.....	do.....	Nov. 16, 1904, to Jan. 8, 1906.....	None.
Todd, Mortimer.....	do.....	do.....	None.

a Is also municipal judge.

On motion of Mr. Harrod, these appointments were confirmed.

At the suggestion of Mr. Burr it was ordered that all reports from the chief engineer be referred to the committee on engineering as soon as received.

The acting chairman asked for the sense of the meeting as to whether awards should be considered by items or classes. After discussion it was ordered that any bidder hereafter may be allowed to state the minimum number of items for which he will accept an award at prices named in his bid.

Mr. Parsons, of the executive committee, reported progress in the consideration of matters referred to that committee at last meeting.

In regard to inspection of medical supplies the chairman of the sanitary committee stated that Doctor Ross reports that the sanitary department on the Isthmus is well equipped for the purpose.

On motion of Mr. Burr, the matter of inspection of machinery, structural material, furniture, plumbing goods, and similar articles was referred to the committee on engineering for report at the earliest practicable date.

The following letters were read by the chairman:

From Governor Davis, dated November 28, 1904, transmitting correspondence from G. C. Schaefer, disbursing officer, and Mr. M. E. Mitchell, relating to a misunderstanding between these officials.

From Governor Davis, dated November 28, 1904, transmitting, with unfavorable comment, the application of Charles Parker, clerk, for increase of pay. This application has the approval of Colonel Gorgas, chief sanitary officer. It was not granted by the Commission.

From Governor Davis, dated November 29, concerning civil-service rules and Commission's appointments. The secretary stated that a reply had been sent to Governor Davis, and that he had been furnished with all available printed circulars.

From Governor Davis, dated November 18, 1904, calling for invoices or cost lists of police supplies. The secretary stated that a reply, with the lists, had been sent at once.

From Governor Davis, dated November 22, 1904, urging prompt delivery of sanitary supplies in requisition 162-B, and asking information as to time. The secretary was directed to reply.

From Governor Davis, dated November 29, 1904, concerning trained nurses in the service of the Commission and as to their number. The secretary was directed to reply.

From Governor Davis, dated November 30, 1904, concerning the call of House Committee on Interstate and Foreign Commerce for his annual report and other papers.

From Governor Davis, dated November 22, 1904, regarding claims of Schuber estate for rentals on land at Corosal and relating to the claim of said estate that they own the "manglares," through which the canal is constructed. Ordered referred to the general counsel.

From Governor Davis, dated November 29, 1904, approving request of Colonel Gorgas for transfer of Mr. Perry from Manila to Ancon, as dispensary clerk, at \$1,200 per annum. Ordered referred to the sanitary committee, which made favorable report, and the same was approved.

From the chief engineer, dated November 28, 1904, stating his objections to the limit of exemptions allowed by agreement between the Canal Commission and the Civil Service Commission. The secretary was directed to reply, sending full information.

From the chief engineer, dated November 29, 1904, concerning estimate for annual report.

The secretary read a letter from the auditor of the Commission concerning the claim of the War Department for \$100 for the transportation of Mr. Charles Parker, late clerk, Medical Department, U. S. Army, from Manila to San Francisco. The matter was ordered referred back to the auditor for all available information.

Requisitions 177-A, 177-A-a, 177-B-2, and 177-C, from the chief engineer, were presented by the acting chairman, and all were ap-

REPORT OF THE ISTHMIAN CANAL COMMISSION.

221

proved, except 177-A, for timbers, which the acting chairman stated could be supplied from the stock on hand or en route at this time.

On recommendation of Mr. Harrod, the following awards were approved:

First. Standard gauges and pipe-line lead furnaces to the Manufacturing Supply Company, of New York, for \$233.22, f. o. b. New York.

Second. Office supplies to the Tower Manufacturing and Novelty Company, New York, for \$42.40, f. o. b. New York.

Third. Bottles to the Hazel Atlas Glass Company, Wheeling, W. Va., for \$25, f. o. b. New York.

Fourth. Photographic supplies to George Murphy (Incorporated), New York, for \$188.75, f. o. b. New York.

Fifth. Three thousand wooden faucets to Frank Baldwin, \$217.50, f. o. b. New York.

All these awards, except the last, are to the lowest bidder; in this case the recommendation is based on a preference for a block tin over a wooden stopper. The amount of this preference is \$67.50.

There being no further business, the meeting adjourned at 1.05 p. m., to the call of the chairman.

SIXTY-THIRD MEETING.

EVENING STAR BUILDING,
Washington, D. C., December 14, 1904.

The Commission met at 3 o'clock p. m.

Present: Acting Chairman Grunsky, Messrs. Parsons, Burr, and Harrod.

Absent: Admiral Walker, en route from the Isthmus of Panama, and Governor Davis, on duty on the Isthmus.

On motion, the reading of the minutes of the meeting of December 13 was dispensed with.

The acting chairman announced that Mr. Gulick, to whom had been offered the position of cashier in the office of disbursing officer of the Canal Zone, made vacant by the discharge of Mr. M. E. Mitchell, had declined; that Mr. James H. Tibbitts was considered as an available man, and it was believed he would accept.

On motion, the matter was referred to the acting chairman, with power to act.

The acting chairman read a communication from Mr. E. A. Drake, vice-president Panama Railroad Company, dated December 12, 1904, respecting the purchase of outstanding stock of the Panama Railroad Company and mentioning that one share had been offered at par.

On motion, the matter was referred to the acting chairman, with power to purchase.

The acting chairman read, for information, letter from Mr. Drake, dated December 12, 1904, concerning apparent careless handling of shipment of currency forwarded to Paymaster Tobey, and inclosing explanation of the general superintendent of the Panama Railroad.

Mr. Parsons, from the executive committee, reported as follows:

The recommendation contained in the secretary's report of December 7, 1904, relating to the establishment of a purchasing division for the Commission's Washington office, is favored. This matter has long been under advisement

by the Commission. The division now recommended should supplement the department of material and supplies. The committee believes that for the present this division should be independent of the material and supplies department, being recognized as a subdepartment of the Commission's Washington office. The immediate employment of a purchasing agent, who will be the head of this division, is recommended. One typewriter and one stenographer and typewriter should at once be assigned for service in the purchasing division. The duties of this division should be preliminarily defined as follows:

To prepare calls for proposed blanks; to keep a record of requisitions and all proposals received; to tabulate and analyze, so far as practicable, bids received; to call for samples when necessary, and to transmit those from the successful bidder to the material and supplies department whenever samples are necessary to determine the quality or character of materials and supplies that are to be delivered on the Isthmus, and to perform such other duties as may be assigned by the Commission.

In the matter of the secretary's recommendation that five additional stenographers and typewriters be employed in the Washington office, the committee recommends that it be given power to act, it being understood that the creation of the new division may relieve the immediate necessity for the full number of stenographers and typewriters, and it being also understood that for the present no additional typewriters should be employed who are not also stenographers.

On motion of Mr. Harrod, the report was adopted.

Mr. Burr moved that the bids of the National Supply Company, of Toledo, Ohio, and of William Wirt Clarke & Son, of Baltimore, Md., for diaphragm pumps and lead pipe, being at rates far below market value for the principal item—lead pipe—and plainly in error, be rejected. Adopted.

Mr. Burr moved that the bid of Fox Bros. & Co., of New York, to furnish nine diaphragm pumps for \$237.09, being the lowest and most advantageous bid, be accepted. Adopted.

Mr. Burr moved that the bid of the J. L. Mott Iron Works, Washington, D. C., for 14,500 feet lead pipe, weighing 3 pounds per foot, for the sum of \$1,819.17, be accepted. Adopted.

Mr. Burr reported as follows on the purchase of self-recording rain gauges and tide gauges, which matter had been referred to him with power:

It is recommended that the Commission purchase both these classes of gauges, with necessary extras, from Julien P. Friez, No. 1230 East Baltimore street, Baltimore, Md., who, at the date of this report, has them in stock ready for shipment.

The following is a descriptive list of the articles needed and the prices at which they are offered:

1 water stage register, No. 3, f. o. b. New York	\$141. 50
60 linear feet extra perforated copper band, at 25 cents	15. 00
1 water stage register, No. 4, f. o. b. New York	126. 50
6 self-recording rain gauges, complete (registers and tipping bucket gauges), f. o. b. New York, at \$101.25	607. 50
4 extra register pens, at \$1.25	5. 00
6 extra rain gauge measuring sticks, at 25 cents	1. 50
Total	797. 00

There will also be required six extra bottles of register ink, 1,200 linear feet copper wire conductor, 6 sets of 3 cells each "Gordon, Edison-Leland," or other good primary batteries.

The above primary batteries and copper wire conductor can be obtained of any good electrical supplies dealer, as Friez does not supply them. He informed me that he has used the Gordon battery with satisfactory results, although he is of the opinion that others are equally good.

REPORT OF THE ISTHMIAN CANAL COMMISSION.

223

In closing this report I desire to state that competitive prices were secured from San Francisco, Boston, and Washington instrument makers, but that the quotation from Friez was lower for the completed instruments than the others, and, further, that he was the only one in condition to supply both classes of gauges.

On motion of Mr. Parsons, the report was adopted, and purchase ordered made in accordance with the recommendation.

At 3.30 p. m., there being no further business, the Commission adjourned, subject to the call of the chairman.

SIXTY-FOURTH MEETING.

BOARD ROOM, PANAMA RAILROAD COMPANY,
New York, December 22, 1904.

The Commission met at the call of the chairman at 10 a. m.

Present: Chairman Walker, Messrs. Burr, Parsons, and Grunsky.

Absent: General Davis, on duty at the Isthmus; Mr. Harrod.

Mr. Grunsky was appointed secretary pro tempore.

The minutes of the meetings of December 13 and December 14 were read and approved.

The chairman called attention to frequent long cables received from the Isthmus, and it was, on motion of Mr. Parsons,

Resolved That the chairman request our representatives on the Isthmus to restrict communications by cable as much as possible.

The chairman reported appointments issued from the Washington office, and appointments as submitted for confirmation by the chief engineer in several communications dated November 22 and 29, December 2, 5, and 6, 1904, and appointments by Governor Davis, all of which were approved subject to any necessary action by the Civil Service Commission:

For service at Washington, D. C.
SECRETARY'S OFFICE.

Name.	Position.	Date of appointment.	Takes effect—	Rate of pay.	Remarks.
Smith, Ray L.	Appointment clerk.	Dec. 15, 1904	Dec. 15, 1904	\$1,200 per year	
Robertson, Alfred	Stenographer.	Dec. 20, 1904	Dec. 21, 1904	do.	

For service on the Isthmus of Panama.
MATERIAL AND SUPPLIES DEPARTMENT.

Warrington, Geo.	Traveling inspector.	Dec. 14, 1904	Jan. 3, 1905	\$200 per month	
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ENGINEERING DEPARTMENT.

Boogert, Herbert V.	Foreman carpenter.	Dec. 19, 1904	Dec. 27, 1904	\$100 per month.	
Bowdry, James	do.	Dec. 20, 1904	Jan. 14, 1905	do.	
Patton, H. M.	do.	do.	do.	do.	
Barnett, John	do.	Dec. 16, 1904	Dec. 20, 1904	do.	
Warren, Rudolph	Foreman miner.	Dec. 15, 1904	Dec. 27, 1904	do.	
Mellvaine, C. A.	do.	Dec. 16, 1904	Jan. 3, 1905	\$125 per month.	
Hollis, Hugh	Clerk, Class III.	Dec. 15, 1904	Dec. 27, 1904	do.	
Scott, Sydney H.	Clerk, Class II.	Dec. 20, 1904	Dec. 30, 1904	\$100 per month.	
Bezel, Wm.	Machinist.	Dec. 17, 1904	Dec. 27, 1904	45 cents per hour.	
Farow, Peter	do.	Dec. 16, 1904	Dec. 30, 1904	do.	
Fowell, Wm. J.	do.	Dec. 13, 1904	Dec. 27, 1904	do.	
Arnold, A. N.	Crane man.	Dec. 16, 1904	Dec. 20, 1904	\$165 per calendar month and \$1 extra for each 1,000 cubic yards of excavated material loaded by shovel in his charge during one calendar month in excess of 25,000.	
Ritter, W. A.	Pitman.	do.	do.	\$75 per month.	

SUBMITTED FOR CONFIRMATION BY THE CHIEF ENGINEER.

Brennan, W. J.	Foreman, grade 2.	Nov. 1, 1904	Nov. 1, 1904	\$83.33 per month.	From, from mach. gr. 3, res. eng., Culebra.
Cassidy, Frank	Machinist.	Nov. 14, 1904	Nov. 14, 1904	45 cents per hour.	To mach. engr.
Hamill, Gus	Assistant foreman, grade 1.	Nov. 16, 1904	Nov. 16, 1904	\$50 per month.	To res. eng., Culebra.
Harris, H. A.	Leveman, gr. 5.	Nov. 25, 1904	Nov. 25, 1904	\$125 per month.	Leave without pay; if health, ch. eng.

Leslie, A. N.	Foreman, grade 1.	Nov. 16, 1904	Nov. 16, 1904	\$75 per month.	To eng. water wks. and sewers.
Lee, O. T.	General foreman, grade 1.	Nov. 1, 1904	Nov. 1, 1904	\$100 per month.	From, from mach. gr. 3, res. eng., Culebra.
Lindell, G.	Foreman, grade 1.	Nov. 15, 1904	Nov. 15, 1904	\$75 per month.	

Leslie, A. N.	Foreman, grade 1	Nov. 16, 1904	\$75 per month	To eng. water wks. and sewers.
Lee, O. T.	General foreman, grade 1	Nov. 1, 1904	\$90 per month	Prom. from mach. gr. 3, res. eng. Culebra.
Lindell, G.	Foreman, grade 1	Nov. 1, 1904	\$75 per month	Discharged, eng. water wks. and sewers.
Macintosh, D.	Clerk, grade 1	Nov. 1, 1904	\$83.33 per month	Prom. from copyist, eng. water wks. and sewers.
MacAndrews, Alex.	Foreman, grade 1	Nov. 16, 1904	\$75 per month	To eng. water wks. and sewers.
Mitchell, F. W.	Assistant time-keeper	do	\$75 per month	To ship architect.
Norby, H. M. B.	Foreman, grade 1	Nov. 17, 1904	\$75 per month	To eng. water wks. and sewers.
Parks, R. I.	Rodman, grade 2	Nov. 16, 1904	\$80 per month	To eng. water wks. and sewers.
Seager, Rose D.	Clerk, grade 1	Nov. 9, 1904	\$80 per month	To eng. water wks. and sewers.
Todriff, J.	Supervisor, grade 1	Nov. 21, 1904	\$150 per month	To eng. office.
Tuttle, E. S.	Foreman, grade 1	Nov. 8, 1904	\$150 per month	Resigned. Res. eng. Culebra.
Williams, P. A.	Assistant time-keeper	Nov. 17, 1904	\$75 per month	Prom. from foreman, gr. 2, mech. eng.
Wirtz, C. J.	Copyist	Nov. 16, 1904	\$75 per month	To mech. eng.
Davis, T. A.	General foreman, grade 1	Nov. 22, 1904	\$100 per month	Trans. from mech. eng. to div. eng. Culebra.
Hart, H. A.	Assistant time-keeper	Nov. 25, 1904	\$100 per month	Resigned. Eng. water wks. and sewers.
Herz, Max.	Clerk, grade 3	Nov. 30, 1904	\$100 per month	Leave without pay, sup. architect.
Fallon, John	Foreman, grade 1	Nov. 26, 1904	\$80 per month	Discharged. Mech. eng.
Tuttle, E. S.	do	Nov. 27, 1904	do	Trans. from mech. eng. to div. eng. Culebra.
Capes, Joseph	Pattern maker	Nov. 28, 1904	Locals per hour	To mech. dept.
Carver, R. B.	Levelman, grade 1	Dec. 1, 1904	\$100 per month	Prom. from rodman, gr. 2.
De Castro, D. M.	Clerk, grade 1	do	\$100 per month	Prom. from copyist.
Fisher, John H.	Foreman, grade 1	do	\$100 per month	Prom. from asst. foreman, gr. 2.
Formander, J.	Machinist foreman	Nov. 9, 1904	\$100 per month	To mech. engineer, Res. Matachin.
Fred, Daniel	General foreman, grade 1	Dec. 1, 1904	\$75 per month	Prom. from asst. foreman, gr. 2.
Gordon, C. A.	Copyist	do	\$75 per month	Prom. from asst. time-keeper.
Grant, Wm. D.	Chain man	do	\$80 per month	To asst. engineer Culebra.
Huntington, L. M.	Levelman, grade 1	Jan. 1, 1905	\$100 per month	Prom. from rodman, gr. 2.
Johnson, Thos.	General foreman, grade 1	Nov. 21, 1904	\$100 per month	To dept. const. Culebra.
Kencke, Arthur	Foreman, grade 1	Nov. 17, 1904	\$75 per month	To const. dept. Culebra.
Maher, Ed.	Assistant foreman, grade 1	Dec. 1, 1904	\$80 per month	Prom. from exp. helper.
Osborne, Herbert	Chain man	do	\$75 per month	To asst. engineer Culebra.
Rowe, Hartley	Rodman, grade 1	do	\$75 per month	Prom. from chain man.
Sutton, Joseph	Assistant foreman, grade 1	do	\$75 per month	To const. dept. Culebra.
Thorne, C. L.	Levelman, grade 2	Jan. 1, 1905	\$125 per month	Prom. from levelman, gr. 1.
Walsh, John	Machinist	Dec. 1, 1904	\$125 per month	Prom. from mach. gr. 3.
Wooden, H. S.	Levelman, grade 1	do	\$100 per month	Prom. from rodman, gr. 2.
Barrett, Abraham	Foreman, grade 2	Dec. 5, 1904	do	To div. eng. Culebra.
Cotton, Frank	General foreman, grade 1	Dec. 1, 1904	do	Prom. from rodman, gr. 1.
Coyne, J. F.	Assistant foreman, grade 2	do	\$125 per month	Prom. from gen. for. gr. 1.
Johnson, Gottfried	Assistant foreman, grade 3	Dec. 5, 1904	\$75 per month	To div. eng. Culebra.
Weeden, Geo. E.	Levelman, grade 1	Dec. 1, 1904	\$100 per month	Prom. from rodman, gr. 2.
Bonnett, J. J.	Chain man	do	\$80 per month	Prom. from helper.
Conley, James	Supervisor, grade 1	Dec. 6, 1904	\$150 per month	Resigned. Asst. eng. Gaun.
Irvin, E. M.	Copyist	Dec. 5, 1904	\$75 per month	To mech. eng.
Leighton, Jos.	Rodman, grade 1	Dec. 6, 1904	do	Resigned. Asst. eng. Gaun.
Parker, C. L.	Clerk, grade 1	Dec. 1, 1904	\$83.33 per month	Prom. from copyist.
Williams, F. J.	Foreman, grade 2	do	do	Prom. from foreman, gr. 1.

On motion of Mr. Burr, it was resolved that the above appointments and promotions be approved in so far as they were made prior to November 15, 1904, except as to Mrs. Rose D. Seager, which appointment was not approved; and that all appointments made subsequent to November 15, 1904, be approved subject to action by the Civil Service Commission.

General Davis, under date of December 6, 1904, submitted the following list of appointments in the government of the Canal Zone during the month of November, 1904, which was approved, subject to action by the Civil Service Commission:

For service on the Isthmus of Panama.

EXECUTIVE DEPARTMENT.

[Executive Office—Appointed by Governor Davis.]

Name.	Position.	Date of appointment.	Takes effect—	Rate of pay.	Remarks.
Pinckney, V. H.	Chief clerk.	Nov. 1, 1904	Nov. 1, 1904	\$1,800 per year.	From. from clerk, \$1,500.

LAND BRANCH.

Anderson, J. T.	Land agent.	Nov. 1, 1904	Nov. 1, 1904	\$1,200 per year.	From. from clerk \$1,000, subs. not allowed when in field.
De Bourbel, B. A.	Rodman, grade 1.	Nov. 1, 1904	Nov. 1, 1904	\$75 per month.	Trans. from eng. dept.
Miller, A. McL.	Surveyor.	Nov. 1, 1904	Nov. 1, 1904	\$150 per month.	From. from levelman, gr. 2, eng. dept.

DEPARTMENT OF REVENUES.

Quijano, Julio.	Inspector.	Nov. 1, 1904	Nov. 1, 1904	\$900 per year.	From. from col. of rev. dept., paid on commission.
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POLICE DEPARTMENT.

Bantz, D. H.	Sergeant.	Nov. 17, 1904	Nov. 17, 1904	\$1,000 per year.	Orig. appointment.
Lowry, J. D.	Clerk.	Nov. 10, 1904	Nov. 10, 1904	\$83.33 per month.	Do.

HEALTH DEPARTMENT.

Arden, Bernard.	Insane warden, Ancon Hospital.	Nov. 1, 1904	Nov. 1, 1904	\$50 per month.	From. from ward attendant.
Duran, F.	Messenger.	Nov. 1, 1904	Nov. 1, 1904	\$300 per year.	From. from mea. at \$18 per mo.
Hoskinson, J. F.	Clerk, class 1.	Nov. 1, 1904	Nov. 1, 1904	\$125 per month.	Orig. appointment.
Molina, Aurelio.	Messenger.	Nov. 1, 1904	Nov. 1, 1904	\$300 per year.	From. from mea. at \$18 per mo.
Sinclair, J. M.	Quartermaster, Ancon Hospital.	Nov. 2, 1904	Nov. 2, 1904	\$300 per year.	From. from mea. at \$18 per mo.
Libert, R. K.	Sanitary inspector.	Nov. 29, 1904	Nov. 29, 1904	\$100 per month.	From. san. insp. at \$100 per mo.

For service on the *Isthmus of Panama*—Continued.

DEPARTMENT OF REVENUES.

Name.	Position.	Date of appointment.	Takes effect—	Rate of pay.	Remarks.
McKay, Wm.	Messenger, Cristobal post-office.	Nov. 8, 1904		Silver. \$65 per month	Orig. appt. to fill vacancy.

HEALTH DEPARTMENT.

Afu.	Laundryman	Nov. 16, 1904		Silver. \$80 per month	Ancon Hospital.
Ahu.	do	do		do	Do.
Ahu.	do	do		do	Do.
Alexander, R.	Orderly	Nov. 13, 1904		\$30 per month	Health officer, Panama, temporary.
Allen, J. H.	Foreman	Nov. 16, 1904		\$100 per month	Ancon Hospital.
Anderson, Levi	Assistant baker	Nov. 19, 1904		\$35 per month	Do.
Arguel, C.	Walter	Nov. 17, 1904		\$40 per month	Do.
Bailey, L.	Orderly	Nov. 26, 1904		\$30 per month	Do.
Belfon, Bryan	do	Nov. 7, 1904		do	Do.
Beresford, M.	Laundress	Nov. 15, 1904		\$24 per month	Do.
Black, Cloval	Foreman	Nov. 18, 1904		\$100 per month	Chief san. insp.
Bowen, Mary	Ward maid	Nov. 19, 1904		\$24 per month	Colon Hospital.
Brown, A.	Orderly	Nov. 21, 1904		\$80 per month	Ancon Hospital.
Brown, J.	do	do		do	Do.
Brown, T. A.	Attendant	Nov. 2, 1904		\$50 per month	Do.
Brown, T. A.	Scullion	Nov. 23, 1904		\$30 per month	Do.
Caldwell, R.	Orderly	Nov. 22, 1904		do	Do.
Caldwell, R.	do	Nov. 16, 1904		do	Do.
Clardy, M.	do	Nov. 21, 1904		do	Do.
Davis, G.	do	Nov. 14, 1904		do	Do.
Davis, Wm.	do	Nov. 16, 1904		70 cents per day	Do.
De Bernu, Chas.	Messenger	Nov. 7, 1904		\$2 per day	Do.
Deleire, A.	Watchman	Nov. 7, 1904		\$30 per month	Do.
Dickinson, J.	Orderly	Nov. 25, 1904		do	Do.
Douglas, Eliz.	do	Nov. 25, 1904		do	Do.
Edburn, N.	Laundress	Nov. 15, 1904		\$24 per month	Do.
Edward, Jas.	Orderly	Nov. 16, 1904		\$30 per month	Do.
Edwards, Jas.	Assistant cook	Nov. 23, 1904		\$35 per month	Do.
Edwards, Wm.	Orderly	Nov. 14, 1904		\$30 per month	Do.
Estrade, E.	Scullion	Nov. 21, 1904		do	Do.
Finlay, S.	Orderly	Nov. 13, 1904		do	Do.
Gonzalez, F.	do	do		do	Do.
Howitt, D.	do	Nov. 28, 1904		do	Do.
Hurd, John.	Scullion	Nov. 1, 1904		do	Do.

Johnson, E. Orderly Nov. 9, 1904 Do.

REPORT OF THE ISTHMIAN CANAL COMMISSION.

229

Johnson, E.	Orderly	Nov. 9, 1904	do	do	Do.
Johnson, G.	do	Nov. 18, 1904	do	do	Do.
Joseph, Lillian	Laundress	do	do	do	Do.
Lagorterie, H.	Ward attendant	Nov. 5, 1904	\$24 per month	Culebra Em. Hospital.	
Levy, Chas.	Sub. foreman	Nov. 28, 1904	\$40 per month	Chief san. insp.	
Long	Laundryman	Nov. 16, 1904	\$80 per month	Ancon Hospital.	
Lynch, R.	Ward maid	Nov. 17, 1904	do	Do.	
Marquez, L.	Sub. foreman	Nov. 26, 1904	\$24 per month	Chief san. insp.	
McFord, L.	Scullion	Nov. 28, 1904	\$80 per month	Ancon Hospital.	
O'Connell, H. A.	Orderly	Nov. 5, 1904	do	Do.	
O'Connell, H. A.	Waiter	Nov. 17, 1904	\$40 per month	Do.	
O'Connell, Henry	Waiter	Nov. 25, 1904	\$2 per day	Do.	
Raffo, Ernest	do	do	do	Do.	
Andolphe, J.	Orderly	Nov. 23, 1904	\$30 per month	Do.	
Robinson, D.	Scavenger	Nov. 10, 1904	\$2 per day	Do.	
Robinson, F.	Laundress	Nov. 15, 1904	\$24 per month	Do.	
Rodriguez, M.	Assistant cook	Nov. 1, 1904	\$35 per month	Do.	
Rudd, Edw.	Attendant	Nov. 16, 1904	\$50 per month	Do.	
Russel, Eliz.	Ward maid	Nov. 21, 1904	\$24 per month	Do.	
Sam	Laundryman	Nov. 16, 1904	\$80 per month	Do.	
Simmons, H.	Orderly	Nov. 13, 1904	\$30 per month	Do.	
Simons, Ernest	Waiter	Nov. 10, 1904	\$40 per month	Do.	
Smith, G.	Laundress	Nov. 21, 1904	\$1 per day	Colon Hospital temporary to relieve sick laundress.	
Smith, Saml	Subforeman	Nov. 24, 1904	\$60 per month	Chief san. inspector.	
Tin	Laundryman	Nov. 16, 1904	\$80 per month	Ancon Hospital.	
Turner, A.	Orderly	Nov. 19, 1904	\$80 per month	Colon Hospital.	
Welsh, Jos.	do	Nov. 10, 1904	\$20 per month	Ancon Hospital.	
Williams, Theo.	do	Nov. 16, 1904	\$30 per month	Do.	

General Davis submitted the following statement of allowances as commutation of quarters granted during the month of November, 1904:

Name.	Position.	Department.	Monthly salary.	Commutation.	
				From—	Amount per month.
Barril, G. V.	Transitman	Engineering	\$150.00	Nov. 1	\$12.00
Castel, R. G.	Clerk	do	80.00	Oct. 11 to Oct. 31.	6.00
Castel, R. G.	do	do	100.00	Nov. 1	8.00
Daly, Michael	General foreman	do	100.00	Oct. 26	8.00
De Bourbel, B. A.	Rodman	do	75.00	Oct. 28	6.00
De Bourbel, B. A.	do	Land	75.00	Nov. 1	6.00
De Castro, D. M.	Clerk	Engineering	75.00	Oct. 1	6.00
Gambotti, A.	do	Land	125.00	Nov. 1	10.00
Gardinkie, Leroy	Stenographer and translator	Judiciary	125.00	Nov. 17	10.00
Haskins, W. C.	Clerk	Material	100.00	Oct. 1	8.00
Hauer, E.	Acting chief	do	225.16	Oct. 5	18.00
Howard, Fred	General foreman	Engineering	100.00	Oct. 26	8.00
Howe, E. C.	Stenographer	Revenues	116.66	Nov. 1	9.33
Johnson, Morris O.	Supervising architect	Engineering	250.00	Nov. 15	20.00
Lacroix, D.	Physician	Health	200.00	Sept. 16	16.00
Lowry, J. D.	Clerk	Police	83.33	Nov. 10	6.66
McCarn, C. D.	Stenographer	Material	100.00	Oct. 1	8.00
McFarland, Earl C.	Clerk	Engineering	100.00	Nov. 1	8.00
Miller, A. McLeod	Levelman	do	125.00	Oct. 1	10.00
Miller, A. McLeod	Surveyor	Land	150.00	Nov. 1	12.00
Moore, F. E.	Clerk	Engineering	125.00	Oct. 21	10.00
Mosher, J. B.	Levelman	do	125.00	Nov. 1	10.00
Pinckney, V. H.	Chief Clerk	Executive	150.00	do	12.00
Ufendell, William G.	Draftsman	Engineering	125.00	do	10.00
Waldron, F. E.	Sanitary Inspector	Health	100.00	do	8.00
Walsh, Thomas J.	Draftsman	Engineering	100.00	do	8.00

The above allowances for commutation were approved.

The chief engineer, by letter dated November 30, asked for the appointment of William Bodette as steam shovelman. The Commission approved the selection, subject to action by the Civil Service Commission.

General Davis, by letter of November 30, reported the appointment of Robert K. Vibert at the salary of \$100 per month, the appointment taking effect November 29, 1904. Confirmed by the Commission, subject to the approval of the Civil Service Commission.

The chief engineer, by letter dated November 29, recommended the repeal of a resolution adopted August 27, 1904, and the substitution therefor of the following, which was, on motion of Mr. Burr, approved:

The chief engineer is hereby authorized to employ for work on the Isthmus, at the rate of 45 cents per hour in gold, such first class experienced blacksmiths, boiler makers, machinists, coppersmiths, molders, pattern makers, and other labor of this character as may be required from time to time for the efficient and economical prosecution of the work under his jurisdiction. The chief engineer is also authorized to employ such helpers and handy men in connection therewith, at the following rates of pay in gold, as the necessities of the work may require:

Helper or handy man, third grade, 35 cents per hour, gold.

Helper or handy man, second grade, 30 cents per hour, gold.

Helper or handy man, first grade, 25 cents per hour, gold.

These rates of pay to remain in force until modified by the action of this Commission.

The chief engineer submitted communications under dates of November 28, November 30, and December 1, 1904, suggesting modifications in the classification of artisans and laborers, which were referred to the committee on engineering for recommendation.

In the matter of appointing Doctor Randall, who is at present the medical officer of the Panama Railroad Company, as one of the physicians in the Colon Hospital (about to be established), it was, on motion of Mr. Grunsky,

Resolved, That the retention of Doctor Randall at a salary of \$200 per month, gold, be authorized.

Mr. Parsons, chairman of the executive committee, reported that upon inquiry it had been ascertained that the Commission could obtain an insurance rate for underdeck steamer shipments to the Isthmus of one-fourth of 1 per cent. This insurance rate would cover goods shipped by the agents of the Commission or by others in behalf of the Commission. Upon motion of Mr. Parsons the matter was referred to the executive committee with power to solicit proposals from insurance companies, to be submitted to the Commission for its action.

A letter from General Davis, relating to a pay ticket in favor of James Gray for \$30, claimed to have been erroneously paid by Cashier M. E. Mitchell, together with inclosures, was read for information.

A number of letters relating to the discharge of Cashier M. E. Mitchell were read for information.

In the matter of the compensation of Mr. Hawkins Taylor, a stenographer formerly in the employ of the Commission, who claims compensation for six weeks' leave of absence, it was, on motion of Mr. Parsons,

Resolved, That, on advice of counsel, Mr. Hawkins Taylor be allowed two weeks' vacation from the date of his leaving the Isthmus (September 14, 1904), and that he be paid as much of his full salary for such period as has not already been advanced him.

In the matter of the application of Mr. Quintero, secretary of public works of the Republic of Panama, for the loan of a well-boring outfit for the use of the Government of the Republic of Panama at Bocas del Toro, the executive committee recommended that the request be not granted, as the Commission has no authority to loan Government property, its loan being prohibited by law.

There was read a letter from General Davis, dated November 22, 1904, relating to the occupation by the United States of a tract of land at Corozal claimed by the Schuber estate, and to their claim of ownership to a large tract of manglares. In this matter the recommendation of the general counsel that the legal rights of the United States in and to said property will be conserved by continuing without discussion the possession maintained by our grantor for many years was approved.

A letter of recommendation, signed by General Davis, that the pay of Clerk J. K. Barrett, of the health department, be increased to \$125 per month, gold, having been favorably reported on by the executive committee, was approved.

In the matter of changing the delimitation line of the Canal Zone, near the city of Panama, the executive committee recommended as follows:

That General Davis be informed that the plan as outlined in his letter of December 6, 1904, and as shown on his accompanying map, is approved, and that he be requested to arrange with the Panaman Government for the changing of the line of the Canal Zone so as to include the cemetery, the adjacent ground

to the north thereof, the remainder of the estate "El Trapiche," and that known as "Santa Rosa," that known as "Juan Vasquez," and a portion of the grounds belonging to some private owners and the city of Panama.

The recommendation of the committee was approved.

On motion of Mr. Parsons, it was—

Resolved, That General Davis be instructed to institute proceedings at once for the condemnation of that portion of the estate known as "Santa Rosa," lying within the Canal Zone.

Chairman Parsons, of the executive committee, reported that in the matter of lack of invoices accompanying shipments the method at present followed of handling the business fully meets all requirements, and there seems to be no doubt that invoices will hereafter be properly forwarded with all shipments.

A letter from General Davis relating to the utilization of canal buildings at Miraflores for the care of insane patients was read, and the use of the canal buildings for this purpose was authorized. The chairman was directed to inform Governor Davis that the necessary staff of employees would have to be obtained through the Civil Service Commission.

A letter from General Davis relating to the compensation of cooks at the Ancon Hospital was read, and Chairman Grunsky, of the committee on sanitation, reported that the increase of pay to cooks had already been authorized by the Commission.

A letter from General Davis, dated December 2, 1904, relating to insect powder and sulphur, was read. The material referred to has already been sent to the isthmus.

A letter from General Davis, dated December 3, 1904, was read, recommending the transfer of the Colon Hospital, a matter which has already been fully acted upon by the Commission.

A letter from General Davis, dated November 28, 1904, was read, transmitting a request from the chief sanitary officer for an assistant in the laboratory of the Ancon Hospital at \$100 per month, Colombian silver. Upon favorable recommendation by the committee on sanitation the employment of the assistant was authorized.

A letter from General Davis, dated December 5, calls attention to the desirability of caring for the indigent sick at some point elsewhere than at the main hospitals of the Commission, and recommends that they be cared for in Commission buildings at Miraflores.

In the matter of the request of the chief sanitary officer that a dietist for the Ancon Hospital be appointed, at a salary of \$75 per month, gold, which request was transmitted by General Davis under date of December 5, 1904, it was—

Resolved, That the position of dietist at the Ancon Hospital be created, to be filled from recommendation of the Civil Service Commission, and that the application of Miss Amy E. Pope for this position be referred to the Civil Service Commission for its information.

A communication was received from Mr. E. A. Drake, vice-president of the Panama Railroad Company, calling attention to the fact that charges for supplies issued to the Canal Commission and its employees from the commissary department on the Isthmus of the Panama Railroad Company have been at cost, plus 20 per cent; that the bills have not been paid to date, owing to the fact that it has been

thought possible that a new basis of charging for supplies might be requested by the Commission. It was, on motion of Mr. Grunsky—

Resolved, That the basis of charging, as indicated in Mr. Drake's letter, be confirmed and approved.

A draft of a proposed arrangement between the Isthmian Canal Commission and the Panama Railroad Company in regard to the maintenance and repair of a joint telegraph and telephone line, was submitted by Mr. E. A. Drake, vice-president of the Panama Railroad Company. The arrangement suggested was, on motion of Mr. Parsons, approved on the basis of apportioning expenses according to the service rendered.

In the matter of the proposals for lumber opened at Washington on December 17, it was moved by Mr. Grunsky that the proposal of J. J. Moore & Co. (Incorporated), of San Francisco, to furnish the lumber called for, aggregating 3,207,000 feet B. M., at the prices named in their proposal, aggregating \$63,181.42, shipment to be in American or foreign vessels, at their option, be accepted. Adopted.

Mr. Burr, on behalf of the committee on engineering plans, reported that the plan suggested by the chief engineer under date of December 6, of widening and lengthening the La Boca pier, had received the approval of the committee, except as to details of construction, and that the committee recommended a modified location of the proposed lumber wharf, which, in its judgment, should have its water-front line 100 to 120 feet from the crest line of the railroad embankment. A full-width connection of this wharf with the La Boca pier is not thought essential.

The report of the committee was approved.

The Commission authorized the increase of the number of creosoted piles to be purchased from 1,000, heretofore authorized, to 2,000, in lengths from 45 to 80 feet.

The Commission adjourned at 1.30 p. m. to the call of the chairman.

SIXTY-FIFTH MEETING.

EVENING STAR BUILDING,
Washington, D. C., December 30, 1904.

The Commission met at the call of the chairman at 11 o'clock a. m.

Present: Chairman Walker, Messrs. Parsons, Burr, and Grunsky.

Absent: General Davis, on duty on the Isthmus of Panama, and Mr. Harrod.

The minutes of the meeting of December 22, 1904, were read and approved.

The chairman read reports and cablegrams from the chief engineer and from the chief of the department of material and supplies regarding the working force in their respective departments.

Mr. Grunsky suggested that as long lists of appointments encumber the minutes some means should be found for omitting the same. It should in each case be sufficient to refer to properly kept records.

The chairman laid before the meeting a communication from the Secretary of War, dated December 27, 1904, inclosing copy of proposed resolution respecting the condemnation of certain lands in the Canal Zone for the use and benefit of the United States, and also draft of an act amending section 6 of act No. 6 of the existing law,

entitled "An act authorizing the exercise of the right of expropriation within the Canal Zone, Isthmus of Panama, as to real estate and immovable property, and as to personal property and property that is partly personal and partly real and providing the method of procedure for exercising that right." Consideration of the matter for the present was deferred.

On motion of Mr. Grunsky it was resolved that the number of ties to be purchased under proposals to be opened on January 25, 1905, be increased from 50,000 to 100,000 cross-ties, of which at least 50,000 are to be 7 by 9 inches by 9 feet, and that the quantity of switch ties be increased from 10 to 100 sets.

The chairman reported that in consequence of urgent cables from the chief engineer he had purchased in the open market 10,000 railroad ties and was negotiating for 10,000 more.

Governor Davis's report, dated December 13, 1904, of the appointment of Mr. Frank Worth Mitchell as postmaster at Ancon at a salary of \$75 (United States currency) per month, to take effect December 13, was approved, subject to confirmation by the Civil Service Commission.

The suggestion contained in Governor Davis's letter of December 17, 1904, that some one be appointed on the Isthmus to administer upon the estates of deceased American citizens dying in the employ of the Government leaving small amounts of property was ordered referred to the general counsel for examination and report.

A communication from Governor Davis, dated December 19, 1904, was read, inviting attention to his letter of November 7, 1904, in which was submitted a proposed amendment to the municipal act (No. 7) providing for the collection of a commercial tax by the municipalities, and asking that action be taken by the Commission in regard to the same. Ordered referred to the general counsel for examination and report.

Governor Davis's letter of December 19, 1904, was read, acknowledging receipt of advance sheets of the laws of the Zone, and asking for an additional supply. The secretary was directed to comply with the request.

Agreeably to the request of Governor Davis, December 20, 1904, the chairman stated that he would ask the Secretary of War to detail a lieutenant of the Army for service as lieutenant of police in the Canal Zone.

The chairman read several cablegrams from the chief engineer regarding appointments in the engineer department, and stated that he would suggest to that officer the propriety of sending such communications by mail.

Communication from Governor Davis, dated December 20, 1904, regarding the appointment of Miss Margaret Gillick as clerk in the hospital at Colon, to date from the day she sailed from New York, was read. On motion of Mr. Burr, the appointment not having been authorized by the Commission and being in violation of Civil Service Regulations, was disapproved.

The letter of Governor Davis, of December 20, 1904, relating to proposed changes in the form of lease now being used for public lands in the Canal Zone was ordered referred to the general counsel for examination and report.

The chairman read a letter from Governor Davis, dated December 20, 1904, inclosing copy of letter from Mr. V. H. Pinckney, chief clerk of the executive office, Canal Zone, respecting charge on account of medical attendance for his wife in the hospital. After discussion, Mr. Pinckney's request that the amount charged for such service be canceled was denied.

There was read for the information of the meeting the following communications:

From the chief of department of material and supplies, dated December 20, 1904, respecting the transfer on January 1, 1905, of the Panama Railroad commissary to the Commission and advising that all preliminary arrangements had been made in the matter, and also that all arrangements had been made for the transfer of the La Boca property, except fixing the value of permanent improvements, and stating that it was planned to take over the entire plant the 16th of January.

From the chief of department of material and supplies, dated December 13, 1904, respecting the location and fixtures of commissary store at Cristobal.

From Governor Davis, dated December 13, 1904, respecting certain rock quarries belonging to Mr. Ricardo Arias, from which building material might be obtained, acquainting the Commission with prices per cubic yard, and stating that the macadamized road ordered by the Secretary of War would cost upward of \$30,000 gold, in addition to grading, drainage, and masonry work on the bridges.

From Governor Davis, dated December 31, 1904, relating to purchase of ice plant from the Panama Railroad Company, and inclosing letter from chief of material and supplies department on same subject requesting early action.

Letter from Mr. Seager, secretary to the chief engineer, dated December 8, was read, referring to plans for enlarging the dock facilities at La Boca, and to the reports of the supervising architect, with accompanying plans, which, he stated, were handed to the chairman by the chief engineer.

A communication from Governor Davis, dated December 20, 1904, respecting the disposal of condemned property, and correcting an error in his former letter.

A letter of Governor Davis, of December 16, 1904, transmitting copy of cablegram to the Secretary of War and reply to same; draft of proposed order to take the place of Executive order of June 24, 1904, and inclosing proposed amendment to act No. 8, which provided for the organization of the Canal Zone, Isthmus of Panama. On motion, the matter was referred to the general counsel for examination and report.

The chairman read for the information of the meeting letter of Governor Davis, dated December 20, 1904, inclosing translation of the Official Gazette of the Republic of Panama relative to Executive orders of December 3 and December 6.

The chairman stated that he had sent a copy of Governor Davis's communication, with the translation referred to, to the Secretary of War.

There was read for the information of the Commission letter of the chief engineer, dated December 20, 1904, suggesting the transfer

of ten stenographers from the Government Departments for service in his department, and also suggesting increased rates of pay for stenographers and typewriters employed on the Isthmus.

The chairman read for information a communication from Governor Davis, dated December 12, 1904, in which he states that he has received no copies of the minutes of the meetings since September 7, 1904.

There was read a letter from the chief engineer, dated December 19, 1904, relating to supply of railroad ties, recommending that 50,000 cypress ties 7 by 9 inches by 9 feet be contracted for at once, in addition to the requisitions already made. The chief engineer, in his letter, also called attention to the delay in filling requisitions for material.

The chairman read copy of cablegram from the chief engineer recommending appointment of E. A. Courtney, of the Illinois Central Railroad, of Chicago, at a salary of \$125 per month. The appointment was approved, subject to the action of the Civil Service Commission.

The chairman read a communication from Governor Davis, dated December 15, 1904, relative to the deportation from the Canal Zone of criminals and persons of certain other classes, and suggesting further legislation in the matter. Ordered referred to the general counsel for examination and report.

Letter from Governor Davis of December 12, 1904, was read, respecting establishment of a temporary hospital for insane and incurables at Miraflores, and inclosing letter from the chief engineer giving estimates of cost of repairs of buildings to be occupied for the purpose, and stating further that he had authorized the work to be undertaken, and asking that his action be approved and that authority be given to proceed with any other necessary work in connection with the establishment of the hospital.

On motion of Mr. Grunsky, Governor Davis's action was approved and necessary authority given.

The chairman laid before the meeting a communication from Governor Davis transmitting requests of the chief sanitary officer and of Doctor La Garde, superintendent of Ancon Hospital, asking an increase of salary to nurses who have shown special efficiency, asking for the appointment of a superintendent of night nurses, at a salary of \$900 per annum, and asking also for an increase of salary to \$1,500 per year for the head nurse.

On motion of Mr. Burr, the proposed increases in salaries were disapproved.

At 1.15 o'clock p. m. a recess was taken until 3 o'clock.

The Commission reassembled at 3 o'clock p. m.

The chairman read for information a communication from Governor Davis, dated December 13, 1904, calling attention to the manner in which his report appeared in connection with the annual report of the Commission.

The chairman read a communication from the chief sanitary officer, dated December 12, 1904, relating to the monthly report of the sanitary department for October, and requesting the return of the same to him to be printed. Mr. Grunsky suggested that a report, in proper form, should be presented each month, and that the chairman might draft a letter to Doctor Gorgas upon the subject. On motion

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of Mr. Parsons the matter was referred to the committee on sanitation, with power to act.

The chairman read a communication from Doctor La Garde, superintendent of Ancon Hospital, dated December 8, 1904, relating to the appointment of a chief for the hospital; the increase of the quartermaster's salary, and asking that the delivery of the new laundry machinery and a cold-storage plant be expedited as rapidly as possible. The letter further suggested that instead of the present charge of 75 cents per hour for electric light, meters be furnished and charges made only for light actually used. The chairman stated that he would write to Doctor La Garde respecting his several recommendations.

A letter from the chief engineer relative to the distribution of the labor force under his jurisdiction and the need for additional labor was discussed, and it was directed that all communications regarding labor supply be referred to the executive committee.

The chairman read a letter from Governor Davis, dated December 10, 1904, accompanied by copies of indorsements of Superintendent La Garde and the chief sanitary officer, recommending the promotion of Mr. J. M. Sinclair, quartermaster at Ancon Hospital. The matter was referred to the executive committee, and upon favorable report being made it was resolved that Mr. J. M. Sinclair, quartermaster at Ancon Hospital, be allowed an increase of salary from \$900 to \$1,200 per annum.

The chairman read a communication from Governor Davis, dated December 19, 1904, inclosing draft with proposed changes in the form of lease now used for leasing the property in the Canal Zone that was acquired from the Panama Railroad Company. On motion the matter was referred to the general counsel.

There was read a letter from Governor Davis, dated December 20, 1904, asking for instructions in respect to the Schuber lands at Corosal. The chairman stated that the general counsel had already rendered an opinion upon this matter which had been acted on by the Commission, and that copy of same would be transmitted to Governor Davis.

The chairman read the order of the Secretary of War, dated December 28, 1904, issued by direction of the President, relating to the establishment and administration of the customs service in the Canal Zone, Isthmus of Panama, as follows:

SECTION 1. For the purpose of customs administration in the Canal Zone there is hereby established a customs district, which comprises all the lands and waters within the control and jurisdiction of the United States on the Isthmus of Panama and the maritime waters contiguous to the shores of the said Canal Zone, extending to the distance of three marine miles from mean low-water mark, but not including any maritime waters that pertain to the harbors of the cities of Panama and Colon in the Republic of Panama, the harbors of which are sufficiently defined under the provisional agreement of delimitation signed by the proper representatives of the governments of Panama and of the Canal Zone on the 15th day of June as modified by the consent of the parties in accordance with the description contained in section 5 of the Executive order of December 3, 1904.

SEC. 2. There shall be two ports of entry in the Canal Zone, to wit, Ancon, at the Pacific terminus of the canal, and Cristobal, at the Atlantic terminus, at which goods, wares, and merchandise may be imported or exported, and vessels may be entered or cleared in accordance with the Executive orders of December 3, 1904, and December 6, 1904.

SEC. 3. The subdivision of the executive branch of the government of the Canal Zone, known as the department of revenues, shall include the administration of the customs laws and tariff regulations in force in the said Zone. The collector of revenues, who by act of the Isthmian Canal Commission is ex officio the collector of customs, shall receive the salary which may be allowed by law, and shall perform the duties of collector of customs as required by the laws now in force in the Canal Zone, or that may hereafter be enacted.

SEC. 4. The deputy collectors and inspectors of customs, the health officers, and port captains of the ports of Ancon and Cristobal shall receive such compensation as may be allowed by law, and will perform their duties at said ports as required by the laws and regulations in force in the Zone.

SEC. 5. The order of December 16, 1904, revoking the order of June 24, 1904, together with this order, shall be proclaimed in the Canal Zone, Isthmus of Panama, and shall be in force from the date of the promulgation.

The chairman read a communication from the Secretary of War suggesting the erection of barracks for the marines at Empire, Cristobal, and Ancon.

On motion of Mr. Parsons, the chairman was directed to communicate with the Secretary of War and the Secretary of the Navy in regard to the matter.

A communication from the chief engineer, dated December 20, 1904, recommending increased pay for firemen and pitmen working in connection with the steam shovels was referred to the executive committee. That committee reported that the recommendation was considered favorably, but it feels that some definite system of promotion and increase of pay should be adopted, and that it will prepare and submit such a programme. The report was approved.

The chairman read communications from the chief engineer, dated November 28, 29, and December 1, 1904, containing proposed classification and rates of pay for employees on construction and transportation work on the Isthmus. The matter was referred to the engineering committee, and upon their favorable report and upon motion the proposed changes in classification and rates of pay as recommended by the chief engineer were approved as follows:

	Gold.
Yardmasters:	
Third grade	\$150. 00
Second grade	140. 00
First grade	130. 00
Engine foremen:	135. 00
Third grade	120. 00
Second grade	100. 00
First grade	
Engine foremen helpers:	90. 00
Third grade	83. 33
Second grade	75. 00
First grade	
Switchmen:	125. 00
Third grade	115. 00
Second grade	100. 00
First grade	
Switchmen helpers:	90. 00
Third grade	83. 33
Second grade	75. 00
First grade	
Work-train conductors:	140. 00
Third grade	120. 00
Second grade	100. 00
First grade	

Trainmen
Third
Second
First
Locomotives
Third
Second
First
Switch engines
Third
Second
First

Foremen
Foremen
Assistants
Third
Second
First
Explosives
Engine drivers
Third
Second
First
Engine
Firemen:
Third
Second
First
Watchmen
General
Round
Night
Second
First

Labor for
Foremen
Foremen
Subforemen
Subforemen
Helpers
Labor
Labor

Trainmen
Trainmen
Trainmen
Helpers
Switchmen
Switchmen
Switchmen
Switchmen

Superintendent
Supervisor
General foreman
Foreman
Foreman
Foreman
Assistant
Assistant
Assistant

REPORT OF THE ISTHMIAN CANAL COMMISSION.

239

Trainmen:	Gold.
Third grade	\$90. 00
Second grade	83. 33
First grade	75. 00
Locomotive enginemen:	
Third grade	145. 00
Second grade	135. 00
First grade	125. 00
Switch enginemen:	
Third grade	115. 00
Second grade	100. 00
First grade	83. 33

Letter of November 29, 1904.

Foremen:	Silver.
Foreman	per hour.. \$6. 00
Assistant foreman	do. .50
Third grade	do. .40
Second grade	do. .35
First grade	do. .30
Experienced helper	do. .25
Engine drivers:	
Third grade	do. .40
Second grade	do. .35
First grade	do. .30
Engine driver's helper	do. .25
Firemen:	
Third grade	do. .25
Second grade	do. .20
First grade	do. .17½
Watchmen:	
General roundsman	do. .50
Roundsman	do. .40
Night foreman	do. .35
Second grade	do. .30
First grade	do. .25
Labor force:	
Foreman, second grade	per month.. 100. 00
Foreman, first grade	do. 75. 00
Subforeman, second grade	do. 60. 00
Subforeman, first grade	do. 50. 00
Helpers, labor, and track force	per hour.. .20
Laborers, second grade	do. .17½
Laborers, first grade	do. .15
Trainmen and switchmen:	
Trainmen or switchmen, second grade	do. .35
Trainmen or switchmen, first grade	do. .30
Helper	do. .25
Switch tenders:	
Switch tenders, third grade	do. .15
Switch tenders, second grade	do. .12
Switch tenders, first grade	do. .10

Letter of December 1, 1904.

Superintendent	Gold.
Superintendent	per month.. \$200. 00
Supervisor	do. 175. 00
General foreman	do. 150. 00
Foreman, third grade	do. 125. 00
Foreman, second grade	do. 100. 00
Foreman, first grade	do. 83. 33
Assistant foreman, third grade	do. 75. 00
Assistant foreman, second grade	do. 60. 00
Assistant foreman, first grade	do. 50. 00

A communication from Surgeon-General Wyman, of the Public Health and Marine-Hospital Service, dated December 29, 1904, was read, announcing that he had directed Passed Asst. Surg. R. H. von Exdorf to report in person to the chairman for duty and instructions, and that the doctor sailed from New York on the 28th of December. The chairman reported that he had sent the doctor to the Isthmus as assistant in the quarantine service. On motion the action of the chairman was confirmed.

The proposed draft of an act amending section 6 of act No. 6 of the existing laws of the Canal Zone was then taken up. Mr. Parsons moved the adoption of the act as read. A vote was taken on the motion and the following named voted "aye:"

The chairman, Mr. Parsons, Mr. Burr, Mr. Grunsky.

Nay: None.

Four members having voted in favor of the motion, the chairman declared it carried and the act enacted as a law of the Canal Zone.

A resolution respecting the condemnation of certain lands in the Canal Zone for the use and benefit of the United States was offered, and, on motion of Mr. Parsons, adopted, as follows:

Resolved, That the governor of the Canal Zone, Isthmus of Panama, is hereby authorized and directed to take steps for and on behalf of the Isthmian Canal Commission to expropriate certain pieces and parcels of land hereinafter described, which land is now subject to private ownership and is situated within the Canal Zone; and the use, control, and ownership of which said land by the United States are hereby declared to be necessary and convenient for the construction, maintenance, operation, sanitation, and protection of the canal connecting the waters of the Atlantic and Pacific oceans, to wit:

1. The estate known by the name of "Santa Rosa," understood to be the property of Mr. Domingo Diaz.

2. The estate known as "Juan Vasquez," understood to be the property of Mr. Domingo Diaz.

3. The estate known as "El Tivoli," understood to be the property of Mr. Frederico M. Pellas.

4. A parcel of land known as "Dolhonde" or "Hatillo de Echeves," understood to be the property of Mrs. M. A. E. Dolhonde.

All of said estates being situated in the municipality of Ancon, Isthmian Canal Zone.

Resolved further, That the direction herein contained shall be executed pursuant to the provisions of act No. 6, Laws of the Canal Zone, entitled "An act authorizing the exercise of the right of expropriation within the Canal Zone, Isthmus of Panama, as to real estate and immovable property, and as to personal property and property that is partly personal and partly real, and providing the method of procedure for exercising that right," as modified by act No. 21, enacted December 30, 1904.

The chairman read a communication from Governor Davis, dated December 6, 1904, referring to a proposed disposal of the lands owned by the Panama Railroad Company in the city of Panama known as "Las Esplanadas" and inclosing draft of resolution bearing upon the subject, to be presented, if thought proper, to the board of directors of the Panama Railroad. The matter was referred to the chairman for consultation with the Secretary of War.

A letter from Mr. E. A. Drake, vice-president of the Panama Railroad Company, dated December 29, 1904, respecting the transfer of the railroad hospital, in which a rate of \$1 per day for the care of railroad employees at Colon Hospital was suggested, was referred to the chairman with power to act.

The meeting adjourned at 4.40 o'clock p. m., to meet at the call of the chairman.

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SIXTY-SIXTH MEETING.

EVENING STAR BUILDING,
Washington, D. C., December 31, 1904.

The Commission met at the call of the chairman at 10.45 o'clock a. m.

Present: Chairman Walker, Messrs. Parsons, Burr, and Grunsky.

Absent: General Davis, on duty on the Isthmus of Panama, and Mr. Harrod.

On motion of Mr. Parsons, the reading of the minutes of the meeting of December 30, 1904, was dispensed with.

The chairman presented a communication from Governor Davis, dated December 8, 1904, respecting the adoption of an appropriate seal for the Commission, and inclosing a design which he recommended for adoption. Upon motion of Mr. Parsons, the matter was referred to the chairman with power to act.

A communication from Mr. E. A. Drake, vice-president Panama Railroad Company, dated December 30, 1904, was laid before the meeting, inclosing report of the ship's surgeon of the *Allianca*, explaining why certain passengers landed at Panama by the steamship *Loa* were refused transportation to New York after they had been passed by the Commission's quarantine officer at Panama. The chairman was requested to refer the same to Governor Davis for his information.

The chairman presented the contracts recently entered into with the Lidgerwood Manufacturing Company for unloaders, calling attention to the bond filed by that company and executed by its president. On motion of Mr. Grunsky, the bond as executed was accepted and the check ordered returned to the Lidgerwood Company.

Mr. Parsons, as chairman of the executive committee, reported that it had considered the request of Mr. William W. Wood, chief clerk in the office of the disbursing officer at Panama, for an increase of pay from \$2,000 to \$2,400 per annum, and recommended that the request be disallowed pending some determination by the Commission as to what shall constitute grounds for increase of pay.

The committee recommended the approval of the chief engineer's suggestion in his letter of December 20, 1904, for a scale of pay for firemen and pit foremen for steam shovel crews, which was adopted, as follows:

	Gold.
Firemen, first class -----per month	\$75.00
Firemen, second class -----do	83.33
Pit foremen, first class -----do	75.00
Pit foremen, second class -----do	83.33
Pit foremen, third class -----do	100.00

The committee reported further that some definite system of promotion and increase of pay should be adopted, and will prepare and submit to the Commission such a programme.

Mr. Parsons, of the executive committee, also reported upon the communication of Governor Davis, submitting voucher in favor of Mr. S. P. Walker, of the engineering department, for \$35 for seven days' lodging while awaiting orders in Panama, referring the question to the Commission to decide the propriety of paying expenses while awaiting orders on the Isthmus.

On motion of Mr. Burr, it was resolved that employees arriving in Panama should be promptly assigned to duty, and that their expenses while awaiting assignments will not be borne by the Commission.

Mr. Parsons moved that the action of Governor Davis approving the voucher of Mr. S. P. Walker be confirmed, but the motion was defeated, Mr. Grunsky being the only member voting in the affirmative.

Mr. Parsons, from the executive committee, also reported regarding the increase of salary from \$1,800 to \$2,400 per annum requested by Mr. A. H. Whelpley, chief clerk in the office of the chief sanitary officer, and referred to the Commission by Governor Davis, that no increase be allowed pending the determination as to what shall constitute reasons for increase. The report was approved.

The report of Capt. E. L. King, general quartermaster, acting for the chief engineer, for the week ending December 13, 1904, was read.

Mr. Parsons, from the executive committee, recommended that this list and the lists of resignations, discharges, appointments, promotions, etc., for week ending December 20, 1904, submitted by the chief engineer, be approved, subject to any necessary action by the Civil Service Commission. On motion, the report of the committee was approved, the lists being as follows:

For the week ending December 13, 1904.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.	Remarks.
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For the week ending December 13, 1904.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.	Remarks.
Allman, J. H.	Foreman, grade 1.	Dec. 1, 1904	Dec. 1, 1904	\$75 per month	To division engineer, Culebra.
Bates, P. M.	Franceman.	Dec. 6, 1904	Dec. 6, 1904	\$165 per month	Do.
Bates, W. H.	Shovel engineer.	do.	do.	\$190 per month	Do.
Bowman, W. H.	Headman, grade 1.	do.	do.	\$75 per month	To general quartermaster.
Combs, J. A.	Clerk, grade 2.	do.	do.	\$100 per month	To chief engineer.
Cox, W. S.	Supervisor, grade 1.	Dec. 4, 1904	Dec. 4, 1904	\$150 per month	Resigned.
Cox, W. S.	Clerk, grade 3.	Dec. 12, 1904	Dec. 12, 1904	\$125 per month	Transferred to division engineer, Culebra.
English, H. F.	Machinist.	Dec. 1, 1904	Dec. 1, 1904	45 cents per hour	To mechanical engineer.
Glancy, J. F.	Supervisor.	Dec. 8, 1904	Dec. 8, 1904	\$150 per month	On vacation.
Harper, A. C.	Resident engineer.	do.	do.	\$275 per month	To mechanical engineer.
La Rock, J.	Machinist.	Dec. 1, 1904	Dec. 1, 1904	45 cents per hour	Resigned.
Leighton, Jos.	Headman, grade 1.	Dec. 6, 1904	Dec. 6, 1904	\$75 per month	To waterworks and sewers.
Osborne, W. J.	Assistant timekeeper.	Dec. 4, 1904	Dec. 4, 1904	\$60 per month	To general quartermaster.
Pachell, W. J.	Clerk, grade 2.	Dec. 6, 1904	Dec. 6, 1904	\$100 per month	To mechanical engineer.
Reeves, W. W.	Machinist.	Dec. 7, 1904	Dec. 7, 1904	45 cents per hour	Resigned.
Scott, John.	Clerk, grade 2.	Dec. 14, 1904	Dec. 14, 1904	\$100 per month	To division engineer.
Stanton, E. G.	Craneman.	Dec. 3, 1904	Dec. 3, 1904	\$165 per month	To mechanical engineer.
Tabor, J. H.	Machinist.	Dec. 1, 1904	Dec. 1, 1904	45 cents per hour	To mechanical engineer.

For the week ending December 20, 1904.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.	Remarks.
Bartlett, H. E.	Photographer.	Dec. 7, 1904	Dec. 13, 1904	\$150 per month.	To chief engineer.
Benedetti, A.	Foreman, grade 1.	Dec. 7, 1904	Dec. 13, 1904	\$80 per month.	To div. eng. Culebra.
Dagley, T. H.	Foreman, grade 2.	Dec. 7, 1904	Dec. 13, 1904	\$83.33 per month.	Prom. from foreman, grade 1.
Daly, H. E.	Carpenter.	Dec. 7, 1904	Dec. 13, 1904	\$100 per month.	To supervising architect.
Donnelly, J. J.	Molder.	Dec. 7, 1904	Dec. 13, 1904	45 cents per hour.	Prom. from 40 cents per hour.
Eitel, Geo.	Foreman, grade 1.	Dec. 12, 1904	Dec. 13, 1904	\$75 per month.	To division eng. Culebra.
Grant, Wm.	Assistant timekeeper.	Dec. 12, 1904	Dec. 13, 1904	\$80 per month.	To supervising architect.
Harley, H.	Messenger.	Dec. 12, 1904	Dec. 13, 1904	\$25 per month.	Do.
Holmes, N. H.	Superintendent construction.	Dec. 9, 1904	Dec. 16, 1904	\$150 per month.	Prom. from foreman, grade 1.
Hummer, C. D.	Foreman, grade 2.	Dec. 9, 1904	Dec. 16, 1904	\$83.33 per month.	Do.
Kean, J. W.	Clerk, grade 3.	Dec. 9, 1904	Dec. 20, 1904	\$125 per month.	Resigned.
Kirk, J. S.	Shovel fireman.	Dec. 9, 1904	Dec. 20, 1904	45 cents per hour.	To div. eng. Culebra.
McKenzie, D.	Molder.	Dec. 9, 1904	Dec. 20, 1904	\$75 per month.	Prom. from 40 cents per hour.
Meehan, I. J.	Craneman.	Dec. 9, 1904	Dec. 20, 1904	\$165 per month.	To div. eng. Culebra.
Meyer, V. A.	Pitman.	Dec. 9, 1904	Dec. 20, 1904	\$75 per month.	Do.
Mitchell, F. W.	Assistant timekeeper.	Dec. 9, 1904	Dec. 12, 1904	\$40 per month.	Trans. to direct. of roads.
Monroe, P. J.	Foreman, grade 1.	Dec. 9, 1904	Dec. 14, 1904	\$75 per month.	To div. eng. Culebra.
Moore, F. E.	Clerk, grade 3.	Dec. 9, 1904	Dec. 14, 1904	\$125 per month.	Transferred to sup't. excavation.
Olsen, Louis	Foreman, grade 1.	Dec. 9, 1904	Dec. 14, 1904	\$75 per month.	To div. eng. Culebra.
Osborne, H.	Assistant timekeeper.	Dec. 9, 1904	Dec. 14, 1904	\$80 per month.	To sp. waterworks.
Powell, L.	Foreman.	Dec. 9, 1904	Dec. 13, 1904	\$125 per month.	To supervising architect.
Robichaux, E. J.	Foreman, grade 2.	Dec. 9, 1904	Dec. 13, 1904	\$83.33 per month.	Prom. from foreman, grade 1.
Spencer, W. H.	Foreman, grade 1.	Dec. 9, 1904	Dec. 13, 1904	\$83.33 per month.	Prom. from 40 cents per month.
Trihey, T. E.	Shovel engineer.	Dec. 9, 1904	Dec. 20, 1904	\$75 per month.	To div. eng. Culebra.
Walsh, J. P.	Foreman, grade 2.	Dec. 9, 1904	Dec. 6, 1904	\$90 per month.	Prom. from foreman, grade 1.

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Referring to a communication of Governor Davis, of December 17, 1904, respecting the installation of a wireless telegraph station and inclosing a copy of letter from Major Lejeune, of the United States Marine Corps, the executive committee reported that it approved as to blocks bounded by F and H and Third and Fifth streets in the city of Colon, and recommended advising the lease of this tract of land by the Panama Railroad directors. The matter was referred to Mr. Parsons, as chairman of the executive committee, who stated that he would take it up at the meeting of the Panama Railroad Company in New York.

Mr. Parsons, of the executive committee, further reported that he had written to three of the largest marine insurance companies and three large insurance brokers asking for rates on marine insurance, and stated that he hoped to have propositions to lay before the board at its next meeting.

Mr. Burr, from the committee on engineering, stated that careful consideration had been given to the communication of Governor Davis, of December 6, 1904, with accompanying letters of Mr. Joseph A. La Prince, chief sanitary inspector, the acting chief engineer, and report of Mr. Carlton B. Davis, engineer in charge of waterworks and sewers, regarding additions and improvements of waterworks at Gorgona and Culebra, and reported favorably on the same. The report was approved and adopted.

Mr. Grunsky reported that the committee on sanitation concurs with the views expressed by Governor Davis in his letter of December 9, respecting the complaint of Doctor Wilkins, of the Ancon Hospital, with accompanying indorsements of Superintendent La Garde, of the Ancon Hospital, and the chief sanitary officer that the ambulance should be cared for at the section and not at the Ancon Hospital. The report was approved and adopted.

Regarding the communication from Governor Davis, dated November 21, 1904, referring to the establishment of an independent scientific laboratory on the Isthmus at this time, Mr. Grunsky, from committee on sanitation, reported unfavorably. The report was adopted.

Mr. Burr, from the committee on engineering, reported favorably upon the recommendation of the chief engineer in his letter of December 20, relative to the proposed purchase of dump cars for the purpose of trial on the Isthmus, and recommended the purchase of such cars in accordance with the terms of the chief engineer's letter, at prices heretofore bid by the three companies named, viz, Goodwin Car Company, Pullman Car Company, and the Western Wheel Scraper Company, of Chicago. On motion the report was approved.

Mr. Grunsky, from the special committee appointed to consider the report made by the auditor of the Commission, presented the following report:

As chairman of the special committee appointed some time ago to consider the report made by our auditor and comments on the same submitted by our treasurer, I want to report progress. The matter has been considered from time to time. It was immediately taken up by the committee, fully considered, and before the departure of the chairman on November 17, 1904, for the Isthmus the committee had reached the conclusion that it was desirable to call upon some expert accountant to make a report upon the classification of expenditures adopted by the Commission, with criticism and suggestions as such accountant may deem appropriate. This action of the committee was called to the atten-

tion of the chairman, who by previous resolution of the Commission had been given authority to select an expert accountant. Immediately upon the return of the chairman from the Isthmus the matter was again taken up with the chairman, and the Commission has, through its executive committee, been in conference with several accounting firms, whose terms are being submitted, and it is expected that the chairman will within a few days select the firm that is to make a report upon our system of accounting.

It seems desirable to the committee that the auditor should have a branch office upon the Isthmus in charge of a deputy, who, in addition to his regular duties under the laws of the Canal Zone, will act for the auditor in the matter of the audit of vouchers for expenditures of the Canal Zone government. The auditor, Mr. Armstrong, is now on his way to the Isthmus to make personal investigations.

Mr. Burr stated that the matter of the Dutton pneumatic lock for canals had been considered by the committee and that the papers relating thereto should be filed as a matter of information.

Mr. Burr also reported that the matter of purchase of a rock-crushing plant, as recommended by the chief engineer, was still under consideration by his committee.

The request of the president of the Civil Service Commission, as per letter of December 29, 1904, for the detail of two clerks for temporary service with that Commission was declined upon the secretary's statement that no clerks could possibly be spared.

Upon motion of Mr. Grunsky, the Commission adjourned at 12.25 p. m.

SIXTY-SEVENTH MEETING.

EVENING STAR BUILDING,
Washington, D. C., January 7, 1905.

The Commission met at the call of the chairman at 10 o'clock a. m.

Present: Chairman Walker, Messrs. Parsons, Burr, and Grunsky.

Absent: General Davis, on duty on the Isthmus of Panama, and Mr. Harrod.

The minutes of the meetings of December 30 and 31, 1904, were read and approved.

Mr. Burr, from the committee on engineering, reported that careful consideration had been given the various bids for sanitary fixtures and roughing materials for bachelors' quarters and for the Ancon Hospital on the Isthmus, and recommended the acceptance of the lowest bids by classes, subject to possible rejection of the bids of the Standard Sanitary Manufacturing Company, of Pittsburg, Pa., and the Ahrens & Ott Manufacturing Company, of Louisville, Ky.

On motion of Mr. Parsons, the report was adopted and the recommendations of the committee ordered to be carried out by the chairman.

Mr. Burr, from the same committee, also reported favorably upon the recommendation of the chief engineer for the appointment of Mr. C. F. Annett as superintendent of telegraph, telephone, and electric lighting, at \$225 per month, salary to begin from the date of sailing.

On motion, the recommendation of the committee was approved.

The chairman stated that Dr. Walter Wyman, Superintendent Public Health and Marine-Hospital Service, had volunteered to purchase for the Commission medicines, surgical instruments, and the like, as his office had a well-equipped purchasing department. On motion,

it was resolved that the matter be referred to the chairman, with power to act.

The chairman also reported that Mr. E. A. Courtney had declined the offer made him of an appointment at \$125 per month under the chief engineer.

The appointment of a purchasing agent was discussed, and on motion of Mr. Burr the matter of the selection of a suitable man for this position was ordered referred to a committee consisting of the chairman and Mr. Grunsky.

The chairman read a communication from Mr. Loeb, Secretary to the President, dated January 6, 1905, directing that hereafter every appointment within the Executive service at Washington be made either from the lists of the Civil Service Commission or from the lists of the board of labor employment, except where specific exemptions are made by the President.

Vouchers for transportation of Messrs. Drake and Shoecraft, referred by Governor Davis, were, on motion of Mr. Parsons, ordered returned by the chairman, directing the governor's attention to the regulations of the Commission that traveling expenses from New York to Colon are not to exceed \$25 for employees, and that the Commission can not authorize the payment of any larger sum.

The chairman read for information a communication from Governor Davis, dated December 22, 1904, respecting the hospital charge of \$1 per day for attendance and medicine and advising that no schedule of charges had been adopted for hospital attendance.

On motion of Mr. Grunsky, the suggestion contained in Governor Davis's letter of December 22, 1904, to allow Doctor Harmon lodging and meals at the hospital at Ancon in addition to his salary of \$1,500 per annum, was approved.

Governor Davis's reference of the requisition for law books for Judge Kyle was ordered referred to the general counsel.

The chairman read a communication from the chief engineer, dated December 25, 1904, suggesting that the question of running night trains on the Panama Railroad be taken up with the Panama Railroad Company. The letter also contained suggestions as to the furnishing of a set of standard switch stands, connecting rods, frogs, etc., of the type used by the Illinois Central Railroad. Ordered referred to the directors of the Panama Railroad Company, with request that action be taken in accordance with the chief engineer's recommendation.

Governor Davis's communication of December 24, 1904, acknowledging receipt of six copies of "the proceedings of the Commission from March to September, 1904, meetings No. 1 to 49 inclusive," was ordered placed on file.

Two communications from Governor Davis, dated December 24, 1904, submitting requests of the superintendent of the Colon Hospital (with concurrence of the chief sanitary officer) for the assignment of one interne to that hospital about March 1, three about June 1, and two about July 1, one nurse about February 1, two nurses about March 1, two about April 1, two about June 1, were referred to the sanitary committee, which reported that internes were authorized in accordance with the scheme of sanitary organization and could be assigned as required, and recommended that one interne be assigned

for duty at Colon Hospital, as requested, commencing March 1, and one nurse assigned February 1.

A communication from Governor Davis respecting the distribution of quinine to inhabitants of the Canal Zone was ordered referred to the sanitary committee.

The chairman laid before the meeting the report of Doctor Balch, with copy of letter of Foreman Egan and the indorsement of the chief sanitary officer, transmitted by Governor Davis, respecting the alleged destruction of clothing of Joseph Bryan by the health department while fumigating his house in Panama.

Upon motion of Mr. Parsons, it was resolved that the chairman be directed to inform the governor that the claim was one of doubtful merit, and the Commission desires fuller evidence before final action, but that where fumigation is for the general good private owners should not be made to suffer loss in consequence.

Communication from Governor Davis, dated December 22, 1904, was read, advising that Dr. John W. Ross, director of hospitals for the Canal Zone, intended to avail himself of a month's leave of absence and resign at the expiration of the same on the ground of ill health.

Upon motion of Mr. Parsons, the matter was referred to the chairman with power to act.

Mr. Grunsky moved that Doctor Ross's place as director of hospitals be not filled for the present, and that the duties of the office be performed by the chief sanitary officer. Adopted.

The following appointments made at the Washington office since December 22, 1904, were approved upon motion of Mr. Grunsky:

For service on the Isthmus of Panama.

ENGINEERING DEPARTMENT.

Name.	Position.	Date of appointment.	Takes effect—	Rate of pay.
Boynston, L. T.	Clerk, class 2.	Dec. 27, 1904	Dec. 28, 1904	\$100 per month.
Chapin, C. L.	Clerk, class 3.	Dec. 23, 1904	Jan. 10, 1905	\$125 per month.
Clifford, M. F.	do.	Dec. 28, 1904	do.	Do.
Hudson, Hood.	do.	Dec. 27, 1904	Dec. 28, 1904	Do.
Prescott, E. H.	Clerk, class 2.	Dec. 23, 1904	do.	\$100 per month.
Sawtelle, H. W.	do.	Dec. 28, 1904	Jan. 17, 1905	Do.
Smith, Jno. H., Jr.	do.	do.	do.	Do.
Spengler, Wirt B.	do.	do.	Jan. 4, 1905	Do.
Thompson, Edgar P.	Clerk, class 3.	do.	do.	\$125 per month.
<i>Architectural draftsmen.</i>				
Perkins, Percy.	Rank of transitman ..	Dec. 28, 1904	Jan. 4, 1905	\$150 per month.
Pingrey, R. E.	do.	do.	do.	Do.
Wehrell, John F.	do.	do.	do.	Do.
<i>Steam-shovel men.</i>				
Anger, G. F.	Crane man.	Jan. 3, 1905	Jan. 4, 1905	\$165 per calendar month and \$1 extra for each 1,000 cubic yards of excavated material loaded by shovel in his charge during 1 calendar month in excess of 25,000.
Holcomb, Wm.	Engineer.	do.	do.	\$190 per calendar month and extra, as above.
Loulan, Frank.	Crane man.	Dec. 27, 1904	Dec. 28, 1904	\$165 per calendar month and extra, as above.
Freeman, T. O.	Fireman.	do.	do.	\$75 per month.
La Saute, Geo.	Pitman.	Dec. 31, 1904	Jan. 4, 1905	Do.
Smoot, R. E.	Fireman.	Jan. 3, 1905	do.	Do.

REPORT OF THE ISTHMIAN CANAL COMMISSION.

249

For service on the Isthmus of Panama—Continued.

ENGINEERING DEPARTMENT—Continued.

Name.	Position.	Date of appointment.	Taken effect—	Rate of pay.
<i>Plumbers.</i>				
Lens, W. C.	Plumber	Dec. 28, 1904	Jan. 10, 1905	\$100 per month.
Malley, J. O.	do	do	do	Do.
<i>Steam and air drill foremen.</i>				
Chase, Theo. T.	Foreman	Jan. 6, 1905	Jan. 10, 1905	\$125 per month.
Lewis, Wm.	do	do	Jan. 10, 1905	\$100 per month.
<i>Carpenters.</i>				
Brown, Henry W.	Foreman	Dec. 23, 1904	Dec. 28, 1904	\$125 per month.
Bucknell, W. B.	do	Dec. 31, 1904	Jan. 17, 1905	\$100 per month.
Burgher, Jos.	do	Dec. 28, 1904	Jan. 4, 1905	Do.
Corrigan, J. A.	do	Jan. 6, 1905	Jan. 10, 1905	Do.
Ducey, Wm. J.	Carpenter	Jan. 4, 1905	do	\$75 per month.
Hall, H. A.	Foreman	do	do	\$100 per month.
McCall, B. F.	do	Dec. 28, 1904	Jan. 1, 1905	Do.
O'Neill, John	do	Jan. 6, 1905	Jan. 10, 1905	Do.
Pendergrass, G. W.	do	Jan. 4, 1905	do	\$125 per month.
Petry, John H.	do	Dec. 23, 1904	Jan. 6, 1905	\$100 per month.
Relf, H. M.	do	Dec. 31, 1904	Jan. 11, 1905	Do.
Russell, J. W.	do	Dec. 24, 1904	Dec. 28, 1904	Do.
<i>Miners.</i>				
Appleton, W. J.	Foreman	Dec. 30, 1904		\$100 per month.
Atterbury, T. C.	do	Jan. 4, 1905		Do.
Aubrey, T. C.	do	Dec. 23, 1904	Jan. 18, 1905	Do.
Brinton, W. H.	do	Dec. 27, 1904	Jan. 4, 1905	\$125 per month.
Gillispie, R. J.	do	Dec. 30, 1904		\$100 per month.
Paquette, Arthur.	do	Dec. 23, 1904	Jan. 3, 1905	Do.
<i>Machinists.</i>				
Bernhardt, J. E.	Machinist	Dec. 24, 1904		45 cents per hour.
Cunningham, B.	do	do		Do.
Davis, B.	do	Dec. 31, 1904		Do.
Dorner, Fritz	do	Dec. 24, 1904		Do.
Dorner, Heinrich	do	do		Do.
Hoskam, C. B.	do	Dec. 27, 1904		Do.
Hoskam, J. M. A.	do	do		Do.
Knuth, R.	do	Dec. 24, 1904		Do.
Morley, Chas. C.	do	Dec. 27, 1904		Do.
Pierston, E. H.	do	Dec. 23, 1904		Do.
Tillman, Wm. T.	do	Jan. 6, 1905		Do.
Wightman, I. J.	do	Jan. 4, 1905		Do.

EXECUTIVE DEPARTMENT.

<i>Office secretary of Canal Zone.</i>				
Baker, Chas. H.	Clerk, class 3	Jan. 4, 1905	Jan. 10, 1905	\$125 per month.
Fay, Clarence F.	do	Dec. 28, 1904	Jan. 10, 1905	Do.

HEALTH DEPARTMENT.

Andrews, Dr. Chas. G.	Interne	Dec. 24, 1904	Dec. 30, 1904	\$50 per month.
Caraher, James	Nurse	Dec. 30, 1904	Jan. 10, 1905	Do.
Payno, Dr. P. M.	Interne	Dec. 23, 1904		Do.

LEGAL DEPARTMENT.

Muus, Harry I.	Sergeant of police	Dec. 23, 1904	Dec. 28, 1904	\$1,000 per year.
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For service on the Isthmus of Panama—Continued.

MATERIAL AND SUPPLIES DEPARTMENT.

Name.	Position.	Date of appointment	Takes effect—	Rate of pay.
Follman, M. A.	Clerk, class 3.	Dec. 28, 1904	Jan. 4, 1905	\$125 per month.
McCutcheon, L.	Storekeeper	Dec. 31, 1904	Jan. 10, 1905	Do.

ACCOUNTS DEPARTMENT.

Carter, Chas. L.	Cashier	Dec. 30, 1904	Jan. 4, 1905	\$2,000 per year.
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A communication from the chief engineer in reference to civil-service regulations recently promulgated was referred to the engineering committee for report.

Mr. Burr, of the committee on engineering, reported progress in the matter of purchase of a modern American rock-crushing plant, stating that the suggestions of the chief engineer were being observed.

The chairman read a communication from Governor Davis, dated December 13, 1904, relating to wire screens. The matter was referred to the committee on sanitation, and Mr. Grunsky, from that committee, reported that after due advertisement proposals had been received for necessary wire-screen material and that in a short time purchase would be made and the requisition filled.

Requisition No. 312 A, from the chief of material and supplies department, for 1,000 creosoted pine piles of different lengths, was laid before the meeting, and on motion of Mr. Parsons it was resolved that the same be purchased after public advertisement.

The chairman read for information House of Representatives Resolution No. 414, Fifty-eighth Congress, third session, calling upon the President to inform the House of Representatives whether it has been the practice of the Isthmian Canal Commission to purchase in foreign countries materials obtainable in the United States, and whether it has been and still is the practice to charter foreign vessels for the conveyance of material to the Isthmus of Panama when American vessels have been and are still available for such purpose.

The chairman read copy of the order of Governor Davis of December 28, 1904, declaring failure to meet commercial obligations on part of employees of the Commission under his jurisdiction on the Isthmus of Panama would be considered sufficient cause for dismissal.

The chairman presented a letter from Judge Kyle, transmitted by Governor Davis, relating to the appointment of a stenographer and clerk of the court in the Canal Zone. On motion of Mr. Grunsky, it was resolved that the appointment of Mr. Hunter Johnson, who had been selected by Judge Kyle as stenographer, be confirmed, and that he be directed to perform for the present, in addition to his other duties, the duties of clerk of the court without increase of pay.

At 12.50 p. m. the Commission took a recess until 2.45 p. m.

The Commission reassembled at 2.45 o'clock p. m.

The chairman read for information a communication from the chief engineer, dated December 22, 1904, asking for the appointment of additional stenographers because of great pressure of work in his department.

A communication from the chief engineer, dated December 26, 1904, relating to the difficulty in obtaining information as to cost of materials, supplies, etc., and requesting that the treasurer or auditor of the Commission furnish his statements at regular periods as to nature of different expenditures was read, and the chairman announced that he would send copy of the same to the chief of material and supplies department, asking him to confer with the chief engineer in regard to the matter.

Mr. Wallace's recommendation of December 24, 1904, asking for the appointment of H. W. Daub as superintendent of water service at \$150 per month was approved, subject to the action of the Civil Service Commission.

A communication from the chief engineer, dated December 29, 1904, with copies of correspondence with Robert W. Hunt & Co., engineers, of Chicago, was ordered referred to the committee on engineering.

The chairman read a letter from the chief engineer, dated December 24, 1904, recommending appointment of H. P. Lutz, of Chicago, Ill., as expert stenographer and typewriter, at a salary of \$125 per month, in the supply department. The recommendation was approved, subject to the action of the Civil Service Commission.

The chairman read a communication from the chief engineer, dated December 29, 1904, respecting the conduct of Mr. C. W. Sturdevant, agent of the Atlantic, Gulf and Pacific Company, who had been given permission and assistance in taking borings and gathering special information regarding the harbor at Colon, asking in reference to course to be pursued when such agents decline to return the courtesy and refuse to give data so obtained. The matter was referred to the chairman for reply.

Mr. Parsons, from the executive committee, reported upon the several propositions for furnishing labor for the construction work on the canal, recommending that the International Banking Corporation be consulted with the view of securing labor in China and Japan, and that Mr. Takihashi be asked to submit a proposition regarding Japanese labor. Report adopted.

The chief engineer's instructions to Mr. Karner, ordering him to proceed to Barbados for the purpose of securing labor there, were read, and upon motion of Mr. Parsons the action of the chief engineer in endeavoring to obtain labor from Barbados was approved, but the chairman was directed to communicate to the chief engineer the views of the Commission regarding this matter.

The chief engineer's letter, dated December 28, 1904, with copies of letters from James W. Sims and C. W. Baines, was laid before the meeting, and his recommendation for the appointment of the latter as stenographer, file clerk, and card indexing expert at \$100 per month was approved, subject to the action of the Civil Service Commission.

The report of the chief engineer, with accompanying appointments, promotions, and resignations, for week ending December 27, 1904, was approved, subject to the action of the Civil Service Commission, as follows:

Appointments, etc., for week ending December 27, 1904.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.	Remarks.
Arnold, A. N.	Cableman	Dec. 16, 1904	Dec. 20, 1904	\$185 per month	To div. engineer, Culebra.
Bodette, Wm.	Shovel engineer	Dec. 8, 1904	do	\$90 per month	Do.
Brown, H. M.	General foreman	Dec. 20, 1904	Dec. 20, 1904	\$100 per month	Do.
Buchan, Geo.	Shovel foreman	Dec. 12, 1904	Dec. 22, 1904	\$75 per month	Do.
Byron, W. E.	Cable guide 3	do	Jan. 1, 1905	do	Resigned.
Castel, R. G.	do	do	Dec. 20, 1904	do	From clerk, gr. 2.
Cook, R. P.	Draftsman	do	Dec. 20, 1904	\$75 per month	Assigned.
Donnelly, E.	Priester	Dec. 20, 1904	Jan. 1, 1905	45 cents per hour	To subject architect.
Galindo, I.	Redman, grade 2	Dec. 20, 1904	Dec. 20, 1904	\$83.33 per month	From redman, gr. 1.
Gray, C. H.	Shovel engineer	Dec. 10, 1904	Dec. 16, 1904	\$190 per month	To div. engineer, Culebra.
Hand, E. K.	General foreman	Dec. 21, 1904	Dec. 16, 1904	\$125 per month	Do.
Homewood, Chas.	Machinist	do	do	45 cents per hour	To mechanical engr.
Krause, Samuel	Fitter	Dec. 12, 1904	Dec. 20, 1904	\$75 per month	Do.
McFarland, E. C.	Clerk, grade 3	do	Dec. 1, 1905	\$125 per month	To div. engineer, Culebra.
Olsen, Louis	Foreman, grade 1	do	Dec. 17, 1904	\$75 per month	From clerk, gr. 2.
Osborne, H.	Assistant foreman, grade 2	do	Jan. 1, 1905	\$80 per month	Assigned.
Parker, C. L.	Clerk, grade 2	do	Dec. 20, 1904	\$90 per month	From est. timekeeper.
Ritter, W. A.	Fitter	Dec. 16, 1904	Dec. 20, 1904	\$75 per month	From clerk, gr. 1.
Terrell, C. N.	Supervisor, grade 1	Dec. 9, 1904	do	\$140 per month	To div. engineer, Culebra.
Torbert, W. A.	Timekeeper, grade 1	do	Jan. 1, 1905	\$75 per month	Do.
Turner, J. M.	Foreman, grade 1	Dec. 22, 1904	do	do	From chain man.
Wiedman, C. G.	Timekeeper, grade 1	do	Jan. 1, 1905	do	To div. engineer, Culebra.
					From asst. foreman.

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Mr. Wallace's request of December 27, 1904, for the appointment of four accountants, two copyists, and one stenographer was approved, subject to the action of the Civil Service Commission.

The recommendation of the chief engineer contained in his letter of December 22, 1904, asking for the promotion of Mr. James E. Beecher, supervisor of tracks and trains, to a salary of \$150 per month, was approved.

A communication from the chief engineer, dated December 22, 1904, respecting a suitable man to act as bridge engineer and recommending Mr. W. E. Angier, of Thebes, Ill., for the position, at a salary of between \$250 and \$300 per month, was, on motion, referred to the chairman with power to act.

The chairman read a communication from the president of the Civil Service Commission transmitting regulations for the isthmian canal service on the Isthmus of Panama, and stating that Commissioner Green and Mr. C. A. Snyder, of the Civil Service Commission, had had personal conference with the governor of the Canal Zone and the chief engineer in connection with these resolutions, and they were pronounced entirely satisfactory by these gentlemen.

A letter from the chief engineer, dated December 22, 1904, was read, asking that there be secured and sent him as soon as possible six pile-driver gangsmen capable of work on pile driving, rough dock, warehouse construction, and bridge work.

The chairman stated that he would take the matter up and do all that was possible to meet the emergency.

The chairman read a communication from Mr. Loeb, Secretary to the President, asking for report respecting complaint as to unfavorable conditions on the Isthmus. The chairman stated that he would reply promptly.

The chief engineer's request of December 22, 1904, that in addition to the two right-hand unloading plows recently purchased two left-hand plows and one additional bank spreader be purchased, was referred to the committee on engineering. Mr. Burr, of that committee, reported favorably, and upon motion it was resolved that the recommendation of the chief engineer be approved, and that the chairman be directed to take the necessary steps to procure the plows and the bank spreader.

The chairman announced that he had secured from the Navy Department the detail of Paymaster Victor S. Jackson, and ordered him to the Isthmus as assistant to chief of material and supplies department. On motion, the action of the chairman was approved.

A communication from the chief sanitary officer relating to the appointment of Miss Margaret Gillick, who held an irregular appointment at Ancon Hospital, was read, and the matter was referred to the chairman for action.

A communication from the chief engineer was read, asking for three additional 70-ton Bucyrus steam shovels. The matter was referred to the executive committee, and upon its favorable report the same was approved and the chairman directed to take necessary steps to purchase same.

Mr. Parsons, from the executive committee, reported that consideration had been given to the recommendation of the chief engineer for the purchase of 2,500 tons of rails, American standard, and recommended purchase of the same be made after advertisement, and if the

bids were not found satisfactory, purchase to be made through the Panama Railroad Company. On motion, recommendations were approved.

There was read a letter from Paymaster Tobey, chief of department of material and supplies, dated December 27, 1904, respecting requisitions from the Isthmus, and asking to be advised of the action of the Commission regarding the same, and, upon motion of Mr. Grunsky, the matter was referred to the chairman with power to act.

Letter was read from chief of department of material and supplies relating to picks, shovels, etc. On motion of Mr. Grunsky, the matter was referred to the chairman with power to act.

Mr. Burr, of the committee on engineering, reported that the bids for furnishing 500 feet of 1-inch 8-ply steam hose and 500 feet of 14-inch 8-ply steam hose had been carefully considered and recommended the acceptance of the bid of the United and Globe Rubber Manufacturing Company of New York. On motion, the report was approved.

Mr. Parsons presented the following resolution:

That during such time as the Commission consists of six members, the chairman and two members shall constitute a quorum for the transaction of business. Adopted.

A communication from the chief engineer, dated December 26, 1904, was read, relating to establishment of a restaurant to provide for the feeding of the workmen at Culebra, and, on motion of Mr. Burr, was referred to Mr. Tobey with power to act.

The Commission adjourned at 4.30 p. m., to meet at the call of the chairman.

SIXTY-EIGHTH MEETING.

EVENING STAR BUILDING,
Washington, D. C., January 10, 1905.

The regular monthly meeting was called to order by the chairman at 10 a. m.

Present: Chairman Walker, Messrs. Harrod and Grunsky.

Absent: General Davis, on duty on the Isthmus, Messrs. Burr and Parsons.

The Commission adjourned to meet in New York on January 12, the hour of meeting to be fixed by the chairman.

SIXTY-NINTH MEETING.

BOARD ROOM, PANAMA RAILROAD COMPANY,
New York, January 12, 1905.

The Commission met at the call of the chairman at 10.30 a. m.

Present: Chairman Walker, Messrs. Harrod, Burr, Parsons, and Grunsky.

Absent: General Davis, on duty on the Isthmus of Panama.

Mr. Grunsky was appointed secretary pro tempore.

The minutes of the meeting of January 7 were read and approved.

Mr. Parsons, chairman of the executive committee, reported that bids had been received for insurance on articles shipped from Atlantic and Pacific ports to Colon and Panama from Douglas Graham Smythe, the Insurance Company of North America, J. A. Eckert & Co., Thames-Mersey Insurance Company, and Johnson & Higgins.

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The character of the bids were such that further analysis of the same would have to precede a definite recommendation in this matter. This would be submitted in writing by the committee.

Mr. Burr, chairman of the committee on engineering, reporting on the matter of rates of inspection, recommended the continuance for the present of the rates and charges for inspection quoted to the Commission by Robert W. Hunt & Co. and Hildreth & Co. for such inspection services as may be required. The committee further recommended that a tabular statement of these rates be made for convenience and information, showing the dates of the letters from which the rates were taken.

Mr. Burr, chairman of the committee on engineering, reported as a matter of progress the situation in regard to the proposed purchase of a rock-crushing plant.

Mr. Burr, chairman of the committee on engineering, reported that engineering data and outline plans for the inner harbor at Cristobal submitted by the chief engineer had been under consideration, and stated that the matter of completing the information required by the Commission would receive the special attention of the committee upon its arrival on the Isthmus.

Chairman Grunsky, of the committee on sanitation, reported as follows:

The report of the chief sanitary officer, submitted some time ago as a report for the month of October, was referred to the committee on sanitation, with instructions to take suitable action with a view to the adoption of permanent forms for the monthly reports.

Regular reports from all subdepartments of the health and sanitary service will be of great value and should be prepared in concise form. The information contained therein should be properly systematized, in order that the publication thereof will be a complete and comprehensive exhibit of the health and sanitary conditions on the Isthmus.

A form for the daily hospital reports was adopted in September after conference with the chief sanitary officer and full agreement of this officer and the director of hospitals.

It was understood that similar blanks would be prepared by the chief sanitary officer for monthly reports, including reports from each emergency hospital and dispensary.

The Washington office was to be supplied with copies of the daily reports, to be forwarded each week. Neither these reports nor the monthly reports have as yet been received.

All reports from the health department should, so far as practicable, be in tabular form, and requirements should be foreseen to such an extent that forms once adopted can be adhered to.

The October report, which is the only one that has ever been received, is more than a monthly report, and it is not in a desirable form for publication.

It was expected that a concise but sufficiently complete report would be made by the medical department upon all of its operations and activities to the close of September or October in time to make it available for use in the preparation of the Commission's First Annual Report, which the Commission was required to submit and did submit to the Secretary of War on December 1.

This committee suggests that a report be now prepared by the health department for publication upon conditions on the Isthmus as they existed when our operations commenced; also upon the work done by the several branches of the service by the maritime-quarantine services, by the health officers of Panama and Colon, by the hospital and dispensary service covering the whole period since the United States took possession of the canal properties on May 4 to the close of the year 1904.

This report should be followed by daily and monthly reports, suitably manifolded, so that copies thereof will be available for the chief sanitary officer, for the governor of the Canal Zone, and for the Washington office.

All such reports should be promptly transmitted.

Professor Burr, of this committee, will take this matter up with the chief sanitary officer on the Isthmus, and it is suggested that report forms prepared and put into use be submitted at the earliest possible date to the Commission, in order that any required modification may be indicated before publication.

This report was adopted.

In reference to the proposition of the International Banking Company to maintain the parity of the peso, as far as the Government requirements were concerned on the Isthmus of Panama, in consideration of a gold deposit with them in New York of \$1,500,000, free of interest, it was, upon motion, determined to be the sense of the Commission that such an arrangement would be of advantage to the Commission in the prosecution of its work on the Isthmus.

A letter was read from Governor Davis, dated December 6, 1904, relating to the proposed purchase of a tract of land known as "Las Esplanadas," now the property of the Panama Railroad Company, by the Republic of Panama.

It was, on motion of Mr. Grunsky, resolved that the chairman be authorized and directed to proceed in the matter of taking over the commissary of the Panama Railroad Company and the establishing of the commissary provided for in the scheme for the organization of the department of material and supplies.

On motion of Mr. Burr, it was

Resolved, That the committee on engineering plans be authorized to ascertain on what terms the services of Mr. F. B. Maltby could be secured for the purpose of making designs of a seagoing dredge and the superintending of dredging operations.

On motion of Mr. Parsons, the meeting then adjourned.

SEVENTIETH MEETING.

EVENING STAR BUILDING,
Washington, D. C., January 17, 1905.

The Commission met at 10.30 a. m., at the call of the chairman.

Present: Chairman Walker, Messrs. Harrod and Grunsky.

Absent: General Davis, on duty on the Isthmus of Panama; Messrs. Burr and Parsons, en route to the Isthmus of Panama.

The minutes of the meeting of January 12, 1905, were read and approved.

A letter from Doctor Gorgas, transmitted by Governor Davis, relating to the monthly expenditure for labor and the hire of teams, was laid before the Commission. The committee on sanitation reported in favor of authorizing an expenditure not to exceed \$1,600 per month for labor, hire of teams, and the like at Ancon Hospital. The report of the committee was adopted and the expenditure authorized.

In the matter of the request of the chief sanitary officer for authority to establish a hospital at Taboga, which request was accompanied by a letter from Governor Davis, the committee on sanitation reported that it is of the opinion that the facilities at Ancon should be extended as required, but that the time has not yet come for establishing an additional hospital at Taboga. The report of the committee was adopted.

Several letters submitted by Doctor Gorgas, under date of December 31, 1904, all relating to the desirability of publishing periodical information regarding the health conditions on the Isthmus, were read. Mr. Grunsky, chairman of the committee on sanitation, stated

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that the views of the committee relating to the matter of publication had already been expressed in its report submitted at the last meeting of the Commission.

The chairman laid before the Commission a letter from W. J. Cameron, State agent for Alabama of the Washington Life Insurance Company, of New York, with regard to building the canal. The matter was referred to the chairman for a suitable reply.

A communication was read from Eugene Goodwin, secretary of the Pacific Coast Hardware and Metal Association, dated January 11, 1905, relating to the requirement in some of the calls for proposals that prices bid shall hold good for unlimited quantities during the current fiscal year, and noting objections to such requirement. It was

Resolved, To be the sense of the Commission that a limiting amount, to be called for within the time covered by the proposal, should be indicated.

The letter was referred to the chairman for answer.

Two communications from J. Z. Nelson, Mount Vernon, Wash., under dates of December 29, 1904, and January 10, 1905, relating to the furnishing of Japanese labor for work on the canal, were read and ordered filed for reference.

A communication from the chief engineer, Mr. J. E. Wallace, submitting a report and tabular statement from Capt. E. L. King, general quartermaster, relating to the number and distribution of employees in the engineering department on the Isthmus, was read and ordered filed for reference.

The resignation of Dr. John W. Ross as director of hospitals, on account of illness, was transmitted by Governor Davis, and was accepted by the Commission, to take effect January 29, 1905.

With reference to the recommendation of Governor Davis that the office of director of hospitals be abolished, Mr. Grunsky stated that the Commission had already acted tentatively in this matter by assigning the duties of this office to the chief sanitary officer.

A communication from E. L. Zalinski, major, United States Army (retired), relating to the supplying of Japanese laborers for work on the canal, was laid before the Commission and ordered filed for reference.

The establishment of a library at Ancon Hospital, requested by the chief sanitary officer and approved by Governor Davis, came up for consideration, and it was the sense of the Commission that a supply of reading matter be provided for the use of the hospital, and that the same should be in charge of regular hospital employees. The Commission authorized the expenditure, through the chairman, of \$300 for the purchase of books, periodicals, and papers for use in the hospitals. The expenditure by the hospital authorities of a sum necessary to provide proper shelves to receive the books was also authorized.

A letter was read from Governor Davis, dated December 30, 1904, transmitting the minutes of a meeting held in Panama with a representative of the Young Men's Christian Association, respecting the establishment of a branch of the Young Men's Christian Association in or near the city of Panama and the providing of a suitable building for its purposes. It was

Resolved, To be the sense of the Commission that Governor Davis be called upon to send a sketch plan of the proposed building for the information and action of the Commission.

A communication from Governor Davis, dated January 3, 1905, transmitting the statement of Joseph Bryan, who claims to have lost goods by fire resulting from fumigation of premises, was read. On motion of Mr. Grunsky, the whole matter was referred to Governor Davis, with directions to ascertain whether the loss was a bona fide one and without collusion on the part of Mr. Bryan. If it was an honest loss, to determine whether the United States or Panama should be responsible for it. If determined that the United States is responsible, to fix a fair and reasonable sum for the property destroyed and authorize payment therefor.

In the matter of the proposal of the Pullman Company, under date of January 11, 1905, to furnish twelve Ingoldsby patent dump cars, the executive committee reported in favor of an acceptance of the proposal. The report was adopted by the Commission.

A letter from James B. Gill, dated January 9, 1905, addressed to the Secretary of War, recommending the adoption of tents of a special design for use on the Isthmus, was read for information.

A letter was read from the chief engineer, dated December 30, 1904, suggesting the advisability of employing a traffic manager who should have charge of the shipment of all material and supplies to the Isthmus. The matter was taken under consideration by the Commission.

Two communications were read from the chief engineer, dated December 30 and December 31, 1904, in which he recommends the appointment of F. G. Chris as supervisor, at \$150 (gold) per month, and the following promotions: E. C. McFarland, from \$100 (gold) per month to \$125 per month; R. G. Castel, from \$100 to \$125, and Charles L. Parker, from \$83.33 to \$100. The appointment and promotions were approved by the Commission, subject to civil service rules.

A letter under date of December 30, 1904, was laid before the Commission from the chief engineer giving an estimate of the amount of coal which will probably be required for the use of the Commission on the Isthmus during the year 1905. The matter was referred to Mr. Harrod for examination and report.

A letter from the chief engineer, dated December 31, 1904, was laid before the Commission. This letter refers to the matter of dump cars, their early delivery, and as to whether patents on the various devices will remain in force on the Isthmus of Panama. The subject of patents was referred to the general counsel of the Commission for examination and report.

A communication was laid before the Commission from the chief engineer, dated December 31, 1904, relating to the use of certain railroad tracks in the vicinity of Cristobal by the Panama Railroad Company. The matter was referred to the chairman, to be taken up with the Panama Railroad Company.

A letter was read from Chief Engineer Wallace, dated January 3, 1905, relating to the equipment of dump cars about to be purchased with air dumping device. Such equipment is favored, and the matter was referred to the chairman for proper action.

A letter from the chief engineer, dated January 3, 1905, inclosing copy of a letter addressed to Governor Davis, under date of December 31, 1904, with regard to the cost of a cog or cable railway on Ancon Hill, was read for the information of the Commission.

A letter from the chief engineer, dated January 3, 1905, in which he suggests the ordering of additional amounts of 4-inch, 6-inch, and 8-inch pipe, with specials for the same, was read, and on the recommendation of the committee on engineering, it was—

Resolved, That this additional material should be obtained, if possible, from the successful bidder for similar material.

A communication from Chief Engineer Wallace, dated January 3, 1905, asking that the Commission purchase 25 pneumatic rock drills, was read. The purchase of these drills was approved by the Commission, and the preparation of specifications for the same was referred to Messrs. Harrod and Grunsky.

A letter from the chief engineer, dated January 3, 1905, relating to the paving of the streets of Panama, and recommending the use of brick as a suitable paving material, was laid before the Commission. In this connection Mr. Harrod submitted the following resolution:

Resolved, That it is the sense of the Commission that such surface or paving as existed over the trenches opened in the streets of Panama be restored, unless, after conference between the authorities of Panama, the governor of the Canal Zone, and the chief engineer, it should appear that the Panama Government is willing to enter into a joint arrangement for the paving of the streets.

Adopted.

The auditor's statement for the month of December, 1904, was laid before the Commission for its information.

At 12.50 p. m. the Commission adjourned to the call of the chairman.

SEVENTY-FIRST MEETING.

EVENING STAR BUILDING,
Washington, D. C., January 21, 1905.

The Commission was called to order by the chairman at 11 o'clock a. m.

Present: Chairman Walker, Messrs. Harrod and Grunsky.

Absent: General Davis, Messrs. Parsons and Burr, on duty on the Isthmus of Panama.

The minutes of the meeting of January 17, 1905, were read and approved.

The chairman read the following appointments made since January 7, 1905, which, on motion of Mr. Grunsky, were confirmed:

For service at Washington, D. C.

SECRETARY'S OFFICE.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.
Anderson, Ed. D.	Clerk	Jan. 12, 1905	Jan. 12, 1905	\$1,200 per year.
Clark, Fred B.	"	Jan. 20, 1905	Jan. 20, 1905	Do.
Daskam, Ralph	"	Jan. 21, 1905	Jan. 21, 1905	Do.
Davison, Forl. D.	"	Jan. 18, 1905	Jan. 18, 1905	\$900 per year.
Stoetz, Robt. F.	Draftsman	Jan. 16, 1905	Jan. 16, 1905	\$1,200 per year.

REPORT OF THE ISTHMIAN CANAL COMMISSION.

For service on the Isthmus of Panama.

OFFICE, SECRETARY CANAL ZONE.

Hathaway, Milton S.	Clerk, class 3	Jan. 17, 1905	Jan. 24, 1905	\$125 per month.
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MATERIAL AND SUPPLIES DEPARTMENT.

Burson, Edgar F.	Storekeeper	Jan. 20, 1905	Jan. 24, 1905	\$1,400 per year.
Callahan, Walter	do	Jan. 16, 1905	do	\$1,000 per year.
Hagemann, Chas. F.	Clerk	Jan. 20, 1905	Jan. 31, 1905	\$1,400 per year.
Hubbard, Ed. L.	Bill clerk	Jan. 18, 1905	do	\$1,200 per year.
Keyes, Jas. G.	Clerk	Jan. 20, 1905	Feb. 1, 1905	\$1,400 per year.
Pursley, Chas. C.	Typewriter	Jan. 14, 1905	Jan. 17, 1905	\$1,200 per year.
Shady, R. C.	Clerk	Jan. 17, 1905	Jan. 24, 1905	\$1,400 per year.
Shields, Geo. R.	Receiving clerk	Jan. 18, 1905	do	\$1,200 per year.
Sweeney, Robt. P.	Receiving and shipping clerk	Jan. 16, 1905	Jan. 25, 1905	Do

HEALTH DEPARTMENT.

Gleason, Mary	Trained nurse	Jan. 7, 1905	Jan. 17, 1905	\$50 per month.
Stahl, S. S.	Property clerk	do	do	\$100 per month.
Wert, A. M.	Clerk, class 2	Jan. 16, 1905	do	\$1,200 per year.

ENGINEERING DEPARTMENT.

Cohen, M. A.	Clerk, class 2	Jan. 17, 1905	Jan. 24, 1905	\$1,200 per year.
Henter, H. H.	do	Jan. 13, 1905	do	\$190 per month.
Moore, Chas. S.	do	Jan. 16, 1905	Feb. 7, 1905	Do.
White, Geo. M.	do	Jan. 13, 1905	Jan. 24, 1905	Do.
Bowles, E. W.	Building superintendent	do	do	\$150 per month.
Stewart, Jno. A.	do	Jan. 17, 1905	do	Do.
Virden, J. C.	Miner foreman	Jan. 13, 1905	Jan. 28, 1905	\$125 per month.
Brennen, Mike.	Switch-engine man	Jan. 17, 1905	Jan. 25, 1905	\$100 per month.
Elliott, R. B.	Yard master	do	Jan. 31, 1905	\$130 per month.
Carty, C. O.	Carpenter foreman	Jan. 10, 1905	Jan. 24, 1905	\$100 per month.
Chapman, C. F.	do	Jan. 13, 1905	Jan. 25, 1905	Do.
Hoard, S. R.	do	do	Jan. 24, 1905	Do.
Kyte, Jno. P.	do	Jan. 7, 1905	Jan. 17, 1905	\$125 per month.
Lon- Brady S.	do	Jan. 13, 1905	Jan. 24, 1905	\$100 per month.
Newbold, Wm. R., Jr.	do	Jan. 9, 1905	Jan. 17, 1905	Do.
Billingsley, Geo.	Carpenter	Jan. 19, 1905	Jan. 24, 1905	\$100 per month.
Bullard, W. L.	do	Jan. 13, 1905	Jan. 17, 1905	\$75 per month.
Bixler, Jos.	do	Jan. 19, 1905	Jan. 24, 1905	Do.
Clarke, Thos.	do	do	do	Do.
Cross, P. A.	do	do	do	Do.
Fields, Jos.	do	do	do	Do.
Gatley, M. A.	do	Jan. 20, 1905	do	\$100 per month.
Gornley, Peter.	do	Jan. 19, 1905	do	\$75 per month.
Hewley, Eugene.	do	do	do	Do.
Hirsch, Carl.	do	Jan. 16, 1905	do	Do.
Jenkins, Chas.	do	Jan. 19, 1905	do	\$100 per month.
Jenkins, Munroe.	do	do	do	\$75 per month.
Kerrigan, Jos.	do	do	do	Do.
Kincade, Wm.	do	do	do	Do.
Lightner, Herbert.	do	do	do	Do.
Long, Henry.	do	do	Jan. 25, 1905	\$100 per month.
Lynch, Owen.	do	do	Jan. 24, 1905	\$75 per month.
Maguire, John.	do	do	do	Do.
Naugle, Ed.	do	do	do	\$100 per month.
Neillie, Andrew.	do	Jan. 20, 1905	Jan. 31, 1905	Do.
Noblet, Geo. H.	do	Jan. 19, 1905	Jan. 24, 1905	Do.
O'Donnell, Jno.	do	do	do	\$75 per month.
Roberts, Geo.	do	do	do	Do.
Ross, Duncan.	do	Jan. 7, 1905	Jan. 17, 1905	\$100 per month.
Schimpf, August.	do	Jan. 10, 1905	do	\$75 per month.
Smith, Y. L.	do	Jan. 13, 1905	Jan. 24, 1905	\$100 per month.
Thornton, Ed.	do	Jan. 19, 1905	do	\$75 per month.
Trachler, Gustav.	do	Jan. 20, 1905	Jan. 31, 1905	Do.
Walter, C. I.	do	Jan. 17, 1905	Jan. 17, 1905	Do.
Young, Julius C.	do	Jan. 19, 1905	Jan. 24, 1905	\$100 per month.
Naylor, J. F. C.	Machinist	Jan. 7, 1905	Jan. 17, 1905	45 cents per hour.

The report of the chief engineer, dated January 10, 1905, of appointments, dismissals, resignations, etc., for week ending January 7, 1905. was approved The report was as follows:

Appointments, promotions, etc., for week ending January 7, 1905.

ENGINEERING DEPARTMENT

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.	Remarks.
Barnett, John.	Carpenter foreman.	Dec. 28, 1904.	Dec. 28, 1904.	\$100 per month.	To supervising architect.
Belmont, A. G.	Foreman, grade 1.	Jan. 1, 1905.	Jan. 1, 1905.	do.	To supervising architect.
Beizer, Wm.	Carpenter foreman.	Dec. 28, 1904.	Dec. 28, 1904.	do.	To chief engineer.
Brynton, L. T.	Clerk, grade 2.	do.	do.	do.	To chief engineer.
Brandon, E.	Foreman.	Jan. 6, 1905.	Jan. 6, 1905.	\$75 per month.	Trans to mech. eng. Pas Matabala.
Brown, H. W.	Carpenter foreman.	Dec. 28, 1904.	Dec. 28, 1904.	45 cents per hour.	To resident engineer, Cristobal.
Bradow, Peter.	Machinist.	Jan. 4, 1905.	Jan. 4, 1905.	\$75 per month.	To mechanical engineer.
Freeman, J. J.	Fitterman.	Dec. 28, 1904.	Dec. 28, 1904.	\$100 per month.	To division engineer, Culebra.
Henriquez, V.	Levelman, grade 1.	Jan. 7, 1905.	Jan. 7, 1905.	\$100 per month.	To resident engineer, Cristobal.
Holls, Hugh.	Clerk, grade 3.	Dec. 28, 1904.	Dec. 28, 1904.	\$125 per month.	To chief engineer.
Hudson, Hood.	do.	do.	do.	do.	do.
Lodan, Frank.	Craftsman.	do.	do.	\$165 per month.	To division engineer, Culebra.
Melville, C. A.	Clerk, grade 1.	do.	do.	\$125 per month.	To chief engineer.
Nunn, Anna.	Time-keeper.	Jan. 1, 1905.	Jan. 1, 1905.	\$50 per month.	Trans to dept. water works and sewers.
Prescott, F. H.	Clerk, grade 2.	Dec. 28, 1904.	Dec. 28, 1904.	\$100 per month.	To general quartermaster.
Rich, J. J.	Foreman, grade 1.	Jan. 1, 1905.	Jan. 1, 1905.	\$75 per month.	To resident engineer, Cristobal.
Russell, J. W.	Carpenter foreman.	Dec. 28, 1904.	Dec. 28, 1904.	\$100 per month.	To supervising architect.
Saeger, Rose D.	Clerk, grade 1.	Jan. 3, 1905.	Jan. 3, 1905.	\$83.33 per month.	Idled.
Shoecraft, E. C.	Craftsman.	Jan. 6, 1905.	Jan. 6, 1905.	\$15 per month.	Trans to mechanical eng., Empire.
Stanton, E. G.	Craftsman.	Jan. 7, 1905.	Jan. 7, 1905.	\$165 per month.	on vacation.
Tuthill, B. S.	Foreman, grade 1.	Dec. 31, 1904.	Dec. 31, 1904.	\$25 per month.	Resigned.

Governor Davis's report, dated January 10, 1905, showing grants of commutation in lieu of quarters for month of December, 1904, was approved. The report was as follows:

Name.	Department.	Position.	Monthly salary.	Commutation.	
				From—	Monthly rate.
Barrett, J. K. ^a	Health	Clerk	\$125 00	Dec. 1	\$10 00
Burt, A. M.	Engineering	Draftsman	175 00	Nov. 26	14 00
Butler, T. J.	do	Copyist	75 00	Oct. 26	6 00
Carmick, E. S.	do	Draftsman	75 00	Nov. 8	6 00
Clay, W. H.	do	do	125 00	do	10 00
Cook, H. T. ^a	Health	Sanitary Inspector	125 00	Dec. 21	10 00
Crowell, C. V. ^b	Appraisal	Member of board	200 00	Nov. 16	16 00
Cuvillier, C. M.	Engineering	Plumber	100 00	Nov. 1	6 00
Dagley, F. H.	do	Clerk	75 00	Oct. 7-Nov. 9	6 00
Daly, H. E.	do	Carpenter	100 00	Dec. 20	8 00
Davidson, S. C.	Executive	Private secretary to governor	150 00	Dec. 3	12 00
De Patron, M. B.	Engineering	Clerk	125 00	Nov. 16	10 00
Hall, W. H.	Health	do	100 00	Nov. 25	8 00
Harris, H. A.	Engineering	Levelman	125 00	Nov. 1	10 00
Kyle, Osceola	Judiciary	Judge of supreme court	500 00	Dec. 15	40 00
Montague, J. E.	Engineering	Chief of division	150 00	Nov. 16	16 00
Page, J.	Disbursing	Clerk	85 00	Nov. 1	6 80
Parker, C. L.	Engineering	Copyist	75 00	do	6 00
Rocks, James	Health	Sanitary Inspector	100 00	July 22	8 00
Scott, John	Engineering	Clerk	100 00	Oct. 6-Nov. 11	8 00
Smith, H. I.	Health	do	100 00	Dec. 9	8 00
Tenny, H. F.	Engineering	Chief of division	150 00	Nov. 16	12 00
Thompson, B.	Health	Clerk	100 00	Nov. 25-Dec. 7	8 00
Torbert, W. A.	Engineering	Chainman	60 00	Nov. 1	1 80
Waldron, F. E. ^a	Health	Sanitary Inspector	125 00	Dec. 21	10 00
Wood, J. B.	Engineering	Clerk	100 00	Nov. 14	8 00
Wright, F. O.	do	Draftsman	175 00	Nov. 25	14 00
Wuttke, P.	Police	Sergeant	85 33	Nov. 25-Dec. 31	6 66

^a Salary increased from \$100 per month.

^b Authorized by Admiral Walker.

^c Salary increased from \$12 per month.

The chairman read for the information of the meeting the following communications:

From Governor Davis, dated January 4, 1905, transmitting estimate prepared by the chief sanitary officer of the personnel required in the establishment of the proposed sanitarium at Taboga.

From Governor Davis, dated January 10, 1905, relating to establishment of a board of inspection, and suggesting that such board could be formed of permanent employees of the Commission on the Isthmus.

From Governor Davis, dated January 6, 1905, respecting the building of a tramway from the neighborhood of the section to the top of Ancon Hill, inclosing report of the chief engineer on the same, and suggesting that the cost reaches such a sum as to make it practically impossible.

From Governor Davis, dated January 3, 1905, relative to postal system and quoting telegram from Mr. Obaldia, minister from Panama to the United States, to Mr. Cooke, collector of revenue, Canal Zone, respecting the same.

From Governor Davis, dated January 10, 1905, transmitting copies of correspondence with Judge Kyle and Mr. N. Barselli relative to certain civil proceedings that had been pending in courts of Panama before the control of the Canal Zone passed to the United States.

From Chief Engineer Wallace, dated January 7, 1905, relative to inspection of material intended for the engineering and construction department.

From Chief Engineer Wallace, dated January 9, 1905, inquiring as to cable messages that have been considered unnecessary.

From Chief Engineer Wallace, dated January 9, 1905, asking for increased number of stenographers.

From Chief Engineer Wallace, dated January 10, 1905, report of personnel, expenses, and distribution of force in his department.

From Chief Engineer Wallace, dated January 10, 1905, inclosing copy of statement of J. B. Clow & Son, addressed to General Humphreys, U. S. Army, regarding sanitary conditions on the isthmus.

From Chief Engineer Wallace, dated January 9, 1905, again explaining his request for increased supply of ties.

From Chief Engineer Wallace, dated January 5, 1905, transmitting report of Carlton E. Davis, engineer in charge of waterworks and sewers, relative to brick pavement for certain streets in Panama and estimate of cost of same.

The chairman laid before the meeting for action the following recommendations:

From the chief engineer, dated January 9, 1905, recommending the employment of Mr. A. S. Thornton as stenographer at \$125 per month, and stating that he was in the employ of the Panama Railroad Company, but had resigned that position and had tendered his services in the engineering department in an emergency.

From the chief of the department of material and supplies, dated January 10, 1905, recommending the promotion of Mr. B. S. Heyer, clerk at Cristobal, from \$65 to \$83.33 per month.

From the chief of department of material and supplies, dated January 10, 1905, recommending promotion of Mr. J. L. Nolan, clerk, from \$75 to \$100 per month.

From chief of department of material and supplies, dated January 10, 1905, recommending promotion of Mr. Harry Leonard, clerk, from \$75 to \$85 per month.

On motion of Mr. Grunsky, the recommendations were approved, subject to the civil-service regulations.

The chairman read two communications from chief of the department of material and supplies, dated January 2 and January 3, 1905, respectively, notifying the chairman of temporary appointments of Mr. J. Simons as lumber clerk at La Boca at \$3 per day and Mr. Charles Franciscani clerk of board survey and appraisal at \$75 per month gold, and asking that the Civil Service Commission be requested to ratify the appointments and make the same permanent if consistent with their regulations.

On motion of Mr. Grunsky, the appointments were approved, subject to the action of the Civil Service Commission.

A communication from the chief of the department of material and supplies, dated January 10, 1905, inclosing copy of correspondence with the chief engineer, was read, relative to the inspection of material and supplies on the Isthmus, and recommending that a competent board of inspection be authorized with necessary assistants.

After discussion of the recommendation, Mr. Grunsky presented the following resolution:

Resolved, That pending a permanent organization of the purchasing division of the material and supplies department, the governor of the Canal Zone, the chief of the material and supplies department, and the chief engineer be authorized to detail employees already in the service of the Isthmian Canal Commis-

sion to make inspection of machinery, material, and supplies purchased on or sent to the Isthmus as to condition only, or as to quality and condition, according to the terms of purchase.

Adopted.

The request of Major La Garde, with the favorable indorsement of the chief sanitary officer, transmitted by Governor Davis under date of January 7, 1905, for twelve additional nurses at the Ancon Hospital, was, on motion of Mr. Grunsky, approved, and a call upon the Civil Service Commission for these nurses was authorized. The same communication from Governor Davis reported the number of sick at Ancon Hospital as 197, of whom 95 were nonemployees.

The recommendation of the chief sanitary officer, with indorsement of Governor Davis of January 9, 1905, for the employment of Dr. J. Tomaselli, at \$1,600 per annum, as physician at La Boca, was considered. Mr. Grunsky moved that a dispensary be established at La Boca, with a physician in charge, at a salary of \$1,800 per annum, and that the Civil Service Commission be requested to approve the appointment of Doctor Tomaselli to that position because of his recognized standing as a yellow-fever expert. The resolution was adopted.

The chairman read a letter from Governor Davis, dated January 7, 1905, respecting claim of ownership of certain land through which the Rio Grande flows from its source to the junction of the tributary Cardenas and submitting preliminary report thereon.

On motion, the matter was referred to the general counsel for examination and report.

The appointment by Governor Davis of Rev. Peter C. Russell, of Missouri, as chaplain at Ancon Hospital was confirmed.

Governor Davis's letter, dated January 6, 1905, with certificate of Doctor Balch that Mr. Howard Ferguson, clerk in office of the executive secretary, was unfit for service on the Isthmus and recommending his transfer, was laid before the meeting. The secretary was directed to notify Mr. Ferguson, through Governor Davis, that if he desired to be transferred to another branch of the Government service he must arrange to be called by the head of the Department into which he desires a transfer.

The chairman read a communication from Governor Davis, dated January 3, 1905, relative to the position of director of hospitals, which he considered unnecessary, and submitting recommendation of the chief sanitary officer for the appointment of Dr. H. R. Carter, now chief quarantine officer, as director of hospitals, and Dr. J. C. Perry as chief quarantine officer.

Mr. Harrod presented the following resolution:

Resolved, That the recommendation of Colonel Gorgas, chief sanitary officer, of December 28, 1904, forwarded by Governor Davis under date of January 3, 1905, for the appointment of Dr. H. R. Carter as director of hospitals and of Dr. J. C. Perry as chief quarantine officer, be approved.

Mr. Grunsky offered the following substitute:

Whereas the necessity for a director of hospitals, suggested by Dr. W. C. Gorgas in his original plan of health department organization, did not receive the unqualified approval of all the Commissioners, as it did not appear an essential feature of an efficient health department organization, but was assented to on account of the great desirability of securing the services of Dr. John W. Ross, U. S. Navy, an eminent authority on tropical diseases, as evidenced by his professional record; and

Whereas the services of Dr. H. R. Carter as chief quarantine officer are of the highest importance and that the Commission would be unwilling to relieve Doctor Carter from the service for which he is so eminently fitted;

Whereas it therefore appears that the recommendation of the chief sanitary officer that Doctor Carter be appointed director of hospitals should not at this time be approved: Therefore, be it

Resolved, That it is the sense of the Commission that the office of director of hospitals is not an essential feature of the health department organization; that the administration of hospital affairs should be under the direct supervision of the chief sanitary officer, and that the chief sanitary officer be requested to submit a plan for the reorganization of the office of the chief sanitary officer to accomplish this result. This reorganization may include a suitable officer to act as an assistant chief sanitary officer, relieving the chief of the department from any increased burdens caused by the proposed consolidation of two offices.

Pending the adoption of a plan of reorganization, the employment of some suitable person to attend to the increased office work incident to hospitals, the temporary service of the chief sanitary officer as acting director of hospitals is hereby authorized.

A vote was taken on the substitute proposed by Mr. Grunsky, and it was adopted, the chairman and Mr. Grunsky voting aye, and Mr. Harrod no.

There was read a communication from Governor Davis, dated January 3, 1905, transmitting letter of the chief sanitary officer, with notification of the resignation of Dr. T. S. Wingo, physician at Bohio, and recommending Dr. John P. Bates to the position, at \$2,400 per annum, thereby made vacant; Dr. D. T. Harmon, now on temporary duty at Ancon Hospital, to the place, at \$1,800, made vacant by Doctor Bates's promotion, and Dr. A. H. Wilton, interne at Ancon Hospital, to the position, at \$1,500, made vacant by Doctor Harmon's promotion.

On motion of Mr. Grunsky, the recommendations were approved, subject to the action of the Civil Service Commission.

The chairman read a communication from Governor Davis, dated January 6, 1905, transmitting letters of Colonel Gorgas, chief sanitary officer, and Doctor La Garde, superintendent Ancon Hospital, relative to internes, and stating that Doctor Welch, of Johns Hopkins University, had expressed a desire to furnish three internes from that institution.

It was ordered that copies of these communications be transmitted to the Civil Service Commission for their consideration in the selection of internes for service on the Isthmus.

A communication from Governor Davis, dated January 4, 1905, transmitting resignation of Mr. I. A. Barnes, asking views of the Commission as to his power to accept resignations, and requesting that the Civil Service Commission be asked to fill the vacancy, was referred to Mr. Grunsky for examination and report.

Governor Davis's order, dated January 5, 1905, to the mayor of the municipality of Ancon, directing him to visit the other municipalities for purposes of inspection and increasing his salary to \$100 per month, was approved.

The chairman read a letter from the chief engineer, dated January 9, 1905, inclosing communication from the supervising architect regarding Mr. Barnett, recently appointed foreman carpenter at \$100 per month, stating that his age (66 years) rendered him unfit for services on the Isthmus. The chairman was directed to notify the chief engineer that Mr. Barnett's appointment was evidently a mistake, and that if he was not fit for service he should be sent back to the United States.

Two communications from the chief engineer, dated January 6, 1905, asking for an increase of force, were read, and the filling of the positions under civil service regulations was authorized: Four rodmen, 2 chain men, 20 locomotive machinists, 10 ordinary machinists, 12 boiler makers, 12 blacksmiths, 5 pipe fitters, 1 coppersmith, 6 molders, 3 pattern makers.

The chairman stated that he would write to the chief engineer in regard to additional quarters for employees on the Isthmus.

A letter from the chief engineer, dated January 9, 1905, was read respecting the appointment of a division engineer experienced in river and harbor work, dredging machines and dredging operations, and recommending the appointment of Mr. F. B. Maltby to that position at a salary of \$5,000 per annum.

On motion of Mr. Harrod, the appointment of Mr. Maltby at \$5,000 per annum was authorized.

There was read a communication from the chief engineer, dated January 9, 1905, relative to the purchase of rock crushers and submitting report of Mr. Carlton E. Davis, engineer in charge of waterworks and sewers, regarding same.

Mr. Harrod, from the committee on engineering plans, reported in favor of the purchase of two rock crushers, both to be of the gyratory type, one having the strength, size, and capacity of the No. 8 Gates crusher and the other of the No. 5 Gates crusher, or, respectively, of the Austin crushers of equal capacities. Mr. Harrod also

On motion the report was adopted, and Mr. Harrod and Mr. submitted form of specification for same.

The chief engineer's request of January 6, 1905, for six additional rodmen and eight men competent to lay and calk joints in cast-iron pipe was approved, and these employees are to be obtained under civil-service regulations.

At 1 o'clock p. m. the Commission took a recess, reassembling at 2.30 o'clock p. m.

Mr. Harrod moved that the matter of present insufficiency of hospital accommodations as reported by Colonel Gorgas, chief sanitary officer, in his letter of December 13, 1904, be referred to the committee on sanitation for report as to facts and on the steps which should be taken to meet any emergency that exists or may occur at the earliest possible moment. The resolution was adopted.

Mr. Harrod reported on rock drills, recommending the purchase of 25, and presented specifications for same.

On motion the report was approved.

Mr. Harrod presented a report recommending the purchase of coal for the year 1905 as follows:

	Tons.
First quarter	3,000
Second quarter	5,000
Third quarter	9,500
Fourth quarter	12,500
Total	30,000

Mr. Harrod also presented specifications for coal.

On motion the report was approved.

Mr. Harrod stated that Mr. Burr, before his departure for the Isthmus, had left with him a letter from the chief engineer asking for the appointment of an electrical engineer, which matter he recommended be held up for the present.

In the matter of the maintenance of a private stable in the hospital grounds and the use of the shops in the section for the repair of private vehicles, referred to by letter of Governor Davis under date of December 27, 1904, it was, on motion of Mr. Grunsky,

Resolved, That the same stable should serve both the section and the hospital. If any animals are stabled in any building not in the section they should be under the same general supervision and management as the section stable. The stabling of private horses, except two for the carriage of the superintendent of Ancon Hospital, in the section stable or in the stable on the hospital grounds is not desirable, but may be permitted on approval of the governor of the Canal Zone, particularly when horses privately owned are used more or less in the service of the Isthmian Canal Commission or the Canal Zone government, but the feeding and care of such horses shall be at the expense of the owners of the horses. Wishing to encourage the use of horses by its employees, the Commission is prepared to sanction the erection on suitable ground of a stable for the exclusive use of its employees in which at private expense private horses may be stabled.

The shops at the section are not available for the shoeing of private horses or the repair of private carriages, but such use may be authorized by the governor whenever the principal use of horses and carriages is in the service of the United States or the Canal Zone. Such use is hereby authorized for the carriage and two horses of the superintendent of Ancon Hospital.

The chairman stated that he would at the next meeting submit for approval a schedule of increased salaries for certain clerks and other employees in the Washington office.

At 3.40 o'clock p. m. the Commission adjourned.

SEVENTY-SECOND MEETING.

EVENING STAR BUILDING.

Washington, D. C., January 25, 1905.

The Commission met at 11.45 a. m. at the call of the chairman.

Present: Chairman Walker, Messrs. Harrod and Grunsky.

Absent: General Davis, Messrs. Parsons and Burr, on duty on the Isthmus of Panama.

The reading of the minutes of the meeting of January 21, 1905, was dispensed with.

The chairman submitted a list of clerks and other employees of the Washington office whose salaries he had increased from date of January 1, 1905, the increased salaries allowed being as follows:

Name.	Position.	Rate of pay.
Mr. E. B. Harden	Chief draftsman	\$200 per month.
Mr. T. O. Wansleben	Draftsman	\$75 per month.
Mr. E. B. DeGraaf	Stenographer	\$100 per month.
Mr. M. J. White	Custodian	Do.
Mr. Millard L. Pearson	Messenger	\$25 per month.
Mr. George Scott	do	\$40 per month.
Miss M. M. Webster	Stenographer	\$75 per month.
Miss V. M. Wells	do	Do.
Miss F. M. Hazard	do	\$80 per month.
Miss M. R. Durfee	Clerk (typewriter)	\$65 per month.
Miss S. E. Zimmerman	do	\$60 per month.
Mrs. E. C. Davidson	do	Do.
Miss E. A. Reynolds	Time clerk	Do.
Miss G. D. Herring	Stenographer	\$85 per month.
Miss L. B. McKelden	Clerk (typewriter)	\$60 per month.
Miss Adelaide Bernhard	do	Do.
Miss Marie Robey	do	\$50 per month.
Miss A. L. Moore	Stenographer	\$75 per month.
Miss Anna M. Root	Accountant clerk	\$65 per month.
Miss Z. Nicholson	Stenographer	Do.

The action of the chairman was approved.

The following resolution as introduced by Mr. Grunsky was adopted:

Resolved, That the governor of the Canal Zone, the chief engineer, and the chief of the department of material and supplies be authorized to discharge for cause or to suspend and to accept resignations of employees stationed on the Isthmus, in their respective departments, whose salaries, exclusive of commutation, do not exceed \$1,800 per year. All such discharges, suspensions, and acceptances of resignations are to be subject to such civil-service rules and regulations as may be in force from time to time, and shall be at once reported to the Isthmian Canal Commission for its approval.

The chairman laid before the meeting the draft of a circular relating to expenses to be allowed to officers and other employees of the Commission when traveling on official business. The matter was taken under advisement.

At 12.30 the Commission adjourned to the call of the chairman.

SEVENTY-THIRD MEETING.

EVENING STAR BUILDING,
Washington, D. C., January 31, 1905.

The Commission met at the call of the chairman at 3 o'clock p. m.

Present: Chairman Walker, Messrs. Harrod and Grunsky.

Absent: General Davis, Messrs. Parsons and Burr, on duty on the Isthmus of Panama.

The minutes of the meetings of January 21 and 25, 1905, were read and approved.

The chairman presented a communication from Governor Davis, dated January 17, 1905, calling attention to the numerous resignations recently tendered in the different departments of the Zone government; his refusal to accept the same until successors are obtained to fill the places; giving reasons for the allowance to employees of increased commutation in lieu of quarters; describing the Sunday outing for employees he has provided in conjunction with the chief engineer; suggesting the necessity of a regular contract to be entered into with each appointee, and requesting that ten employees, half at \$100 and half at \$125 per month, be sent him as soon as possible.

On motion of Mr. Harrod, it was

Resolved, That the question of the sufficiency of the commutation of quarters now allowed to employees on the Isthmus be referred to the executive committee for report as soon as possible.

The chairman read a letter dated January 12, 1905, from Fred W. Ames, jr., pharmacist at Ancon Hospital, requesting that the increase in salary recently allowed him be dated from September 15, 1904, in accordance with the scheme for the reorganization of the Ancon Hospital. The letter bore favorable indorsements from Doctor La Garde, superintendent Ancon Hospital, Col. W. C. Gorgas, chief sanitary officer, and Governor Davis. In this connection Mr. Grunsky introduced the following:

Whereas in the plan of the organization of the health department it was intended to fix the salary of the druggist at Ancon Hospital at \$1,500 per year, with quarters and board; and

Whereas the amount has erroneously been entered in the approved minutes at \$1,200: Therefore, be it

Resolved, That it was the intent of the Commission to allow the druggist at Ancon Hospital \$1,500 per year, with quarters and board, taking effect on September 15, 1904, and that the druggist referred to, F. W. Ames, Jr., is hereby declared to be entitled to compensation at that rate from said date.

The resolution was adopted.

Mr. Grunsky, from the committee on sanitation, reported on the resolution of January 25, 1905, in the matter of the number of sick that can be provided for at the hospitals of the Commission on the Isthmus as follows:

ANCON HOSPITAL.

Ordinary capacity, about 500 beds. Emergency capacity, about 700 beds. Hospital space now used for quarters of officers and for about 40 canal employees is equivalent to about 200 beds.

The remaining space now available will accommodate about 300 patients.

The space which has been occupied by the Sisters of the Order of St. Vincent de Paul will at once be occupied by nurses who will vacate a ward, thereby adding about 30 beds to the available space.

The hospital officers, now in a two-story ward building, should be put into other quarters as soon as possible.

The two wards now occupied as men's quarters should also be vacated as soon as other quarters can be assigned.

There are now in the hospital about 200 patients, of whom some are incurables, who are to be transferred to the Miraflores Hospital, now open, with a capacity of 100 beds.

COLON HOSPITAL.

Is nearing completion.

Is being equipped for 100 beds.

The number of patients at present is about 30.

MIRAFLORES HOSPITAL.

Is now ready for occupancy.

Its capacity is 100 beds.

It is to be used for lepers, insane, and incurables.

It therefore appears that the present available capacity of Ancon and Miraflores hospitals, without crowding exceeds 400 beds, while the number of patients reported is about 200.

On motion of Mr. Harrod, the report was adopted.

Mr. Grunsky, from the committee on sanitation, presented the following preamble and resolution:

Whereas the Commission has information by cable from Governor Davis that the Republic of Panama has admitted its inability to adequately enforce the sanitary ordinances prescribed by the United States for the cities of Panama and Colon; and

Whereas under Article VII of the treaty between the United States and the Republic of Panama, approved November 18, 1903, the United States in such case has the right to enforce sanitary ordinances: Therefore, be it

Resolved, That the action of Governor Davis in taking charge of the sanitary work in the cities of Panama and Colon, including street cleaning and garbage disposal, be, and the same is hereby, approved, and the expenditures of any sums necessary for sanitary purposes in those cities is hereby authorized, and that the substance of this resolution be communicated to Governor Davis.

On motion of Mr. Harrod, the resolution was adopted.

The chairman stated that he had notified Governor Davis by cable, under date of January 27, 1905, that such sanitary measures as he should see fit to take would receive the approval of the Commission.

The chairman laid before the meeting a letter of the chief engineer, dated January 17, 1905, respecting rock-crushing machinery taken over from the French company and now on the Isthmus and justify

ing his recommendation for the erection of a modern rock-crushing plant.

The chief engineer's letter of January 14, 1905, suggesting increasing the equipment of the Panama Railroad Company by the purchase of 100 steel flat cars, so that they may be used interchangeably with the construction flat cars ordered by the Commission, was referred to the chairman, to be taken up by him with the Panama Railroad Company.

The question of coal supply was discussed, and Mr. Grunsky moved that in view of the fact that the Panama Railroad Company has made an informal offer to furnish coal of approved quality at any point along its line at the rate of \$6 per ton the action of the Commission authorizing the purchase of coal be rescinded and that arrangements be made with the Panama Railroad Company to continue furnishing coal for the present at the reduced price.

The resolution was adopted, the chairman and Mr. Grunsky voting aye, and Mr. Harrod no.

Mr. Grunsky also presented the following resolution, which was unanimously adopted:

Resolved, That the chief of the department of material and supplies be instructed to prepare for the receipt of large shipments of coal and to keep the Commission advised as to the quantity required from quarter to quarter.

Governor Davis's letter of January 17, 1905, respecting the desirability of establishing definite rules relating to the granting of transportation from the Isthmus to the United States at reduced rates, was read, and the matter was referred to Messrs. Grunsky and Harrod for suitable recommendation.

The chairman read a communication from L. H. Bigelow & Co., of New York, dated January 30, 1905, asking payment of bill of \$125 for stationery, and inclosing copy of letter from Mr. Tobey, chief of department of material and supplies, dated July 12, 1904, ordering the same. The matter was ordered referred to Mr. Tobey for explanation, as the bill seemed to be irregular.

The chairman laid before the meeting the report of Judge Magoon, general counsel of the Commission, on the proposed amendment to the municipal act (No. 7) submitted by Governor Davis, under date of December 19, 1904, providing for the collection of a commercial tax by the municipalities of the Canal Zone, and transmitting four copies of draft prepared by Governor Davis, modified by striking out the words "board of assessment" and inserting the word "council."

The amendment is as follows:

An ACT to amend act No. 7 of the Isthmian Canal Commission, entitled "An act to provide for the organization of municipal governments in the Canal Zone, Isthmus of Panama."

By authority of the President of the United States, be it enacted by the Isthmian Canal Commission:

That section 28 of act No. 7 of the Isthmian Canal Commission, approved on September 1, 1904, be, and the same hereby is, amended by inserting as the fifth paragraph of said section the words:

"Fifth. A tax on goods and merchandise consumed within the municipality to be equitably levied by the municipal council on the sale for consumption of commercial commodities.

Mr. Grunsky moved the adoption of the act as read. A vote was taken on the motion, and the following named voted "aye:" The chairman, Mr. Harrod, Mr. Grunsky. Nay: None.

Three members having voted in favor of the motion, the chairman declared it carried and the act enacted as a law of the Canal Zone.

A letter from Messrs. Hopkins & Co., dated January 31, 1905, was read, respecting the recent bid of Brown & Co., of New York, on ties, bids for which were publicly opened on the 25th of January, 1905.

The matter was referred to the executive committee.

The chairman presented a list of appointments made, with approval of the Civil Service Commission, since January 21, 1905, as follows:

For service at Washington, D. C.

SECRETARY'S OFFICE.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.
Crowell, Daniel J.....	Stenographer and type....	Jan. 30, 1905	Jan. 30, 1905	\$900 per year.

For service on the Isthmus of Panama.

MATERIAL AND SUPPLIES DEPARTMENT.

Brooks, Arthur C.....	Storekeeper	Jan. 28, 1905	Feb. 7, 1905	\$1,000 per year.
Greene, Frank E.....	Clerk	Jan. 24, 1905	Jan. 31, 1905	\$1,200 per year.
Guterian, Frederick ..	Stock ledger clerk.....	Jan. 21, 1905	do	\$1,400 per year.
Judson, Claud C.....	Lumber storeman.....	Jan. 24, 1905	Feb. 8, 1905	\$1,000 per year.

EXECUTIVE DEPARTMENT.

Hayworth, George	Stenographer.....	Jan. 25, 1905	Feb. 1, 1905	\$125 per month.
Johnson, Julius R.....	Clerk	Jan. 25, 1905	Jan. 31, 1905	\$120 per month.

ACCOUNTS DEPARTMENT.

Beck, Edgar.....	Clerk.....	Jan. 24, 1905	Jan. 31, 1905	\$1,200 per year.
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ENGINEERING DEPARTMENT.

Daub, H. W.....	Supervisor.....	Jan. 26, 1905	Feb. 15, 1905	\$150 per month.
Colt, Alexander.....	Transitman.....	Jan. 24, 1905	Feb. 4, 1905	Do.
Grim, C.....	Building superintendent..	Jan. 25, 1905	Feb. 15, 1905	Do.
Edmiston, J. S.....	Yardmaster	Jan. 28, 1905	Feb. 8, 1905	\$130 per month.
Griffin, Frank H.....	Machinist	Jan. 25, 1905	Jan. 31, 1905	45 cents per hour.
Ash, Eugene H.....	Accountant	Jan. 25, 1905	Jan. 31, 1905	\$1,200 per year.
Hook, David E.....	Copypist	Jan. 24, 1905	do	\$900 per year.
Sowden, W. A.....	Accountant	do	Feb. 1, 1905	\$1,200 per year.
Murphy, Martin.....	Rodman	Jan. 28, 1905	Feb. 11, 1905	\$83.33 per month.
Costello, Daniel.....	Switch engineman.....	Jan. 27, 1905	Jan. 31, 1905	\$1,000 per year.
Hamilton, Theo. T.....	do	Jan. 28, 1905	Feb. 8, 1905	\$80 per month.
Stanley, C. D.....	do	Jan. 25, 1905	do	\$100 per month.
Gaskill, J. F.....	Work-train conductor.....	Jan. 28, 1905	do	Do.
Hughes, T. P.....	do	do	do	Do.
Lipsett, L. M.....	Carpenter foreman.....	Jan. 29, 1905	Feb. 7, 1905	\$125 per month.
Thomas, Frank B.....	do	Jan. 25, 1905	Feb. 15, 1905	Do.
Angus, E. H.....	Carpenter	Jan. 24, 1905	Jan. 31, 1905	\$100 per month.
Austin, Alfred D.....	do	Jan. 25, 1905	do	Do.
Ayco, Robert Lee.....	do	Jan. 28, 1905	Feb. 8, 1905	Do.
Bard, William S.....	do	Jan. 26, 1905	Feb. 7, 1905	\$75 per month.
Basinet, W. J.....	do	Jan. 25, 1905	do	\$100 per month.
Bealer, H. W.....	do	Jan. 26, 1905	Jan. 31, 1905	\$75 per month.
Bell, Jas. A.....	do	Jan. 21, 1905	do	\$100 per month.

For service on the Isthmus of Panama—Continued.

ENGINEERING DEPARTMENT—Continued.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.
Blood, Ray E.	Carpenter	Jan. 26, 1906	Jan. 31, 1906	\$100 per month.
Briggs, Fred	do	do	do	Do.
Caster, John P.	do	Jan. 21, 1906	do	Do.
Cooper, John M.	do	Jan. 26, 1906	do	Do.
Crossley, Samuel	do	Jan. 26, 1906	do	\$75 per month.
Ducklin, John	do	do	Feb. 15, 1906	\$100 per month.
Duey, Chas. W.	do	do	Feb. 1, 1906	Do.
Fabian, John J.	do	do	Jan. 31, 1906	\$75 per month.
Fite, Thos. J.	do	do	do	\$100 per month.
Francis, John	do	Jan. 25, 1906	do	Do.
Garner, Ernest P.	do	Jan. 21, 1906	do	Do.
Hagerty, Chas. F.	do	Jan. 26, 1906	do	\$75 per month.
Hayden, Frank L.	do	Jan. 23, 1906	do	Do.
Hodges, Jas. F.	do	Jan. 26, 1906	do	Do.
Homes, Jas. B.	do	Jan. 21, 1906	do	\$100 per month.
Honey, Wm. B.	do	Jan. 24, 1906	do	Do.
Johnson, Harry	do	Jan. 25, 1906	do	Do.
Kelly, Edward W.	do	Jan. 27, 1906	Feb. 7, 1906	Do.
Kleindienst, Jos. E.	do	Jan. 21, 1906	Jan. 31, 1906	Do.
McDougall, Archie	do	Jan. 28, 1906	Feb. 15, 1906	Do.
Menew, Lee	do	Jan. 25, 1906	Feb. 7, 1906	Do.
Miller, H. R.	do	do	Jan. 31, 1906	\$75 per month.
Morrison, George	do	do	Feb. 7, 1906	Do.
Murray, David	do	Jan. 26, 1906	Jan. 31, 1906	Do.
Murray, John J.	do	Jan. 28, 1906	Feb. 15, 1906	\$100 per month.
Plucker, E. W.	do	Jan. 26, 1906	Jan. 31, 1906	Do.
Schindele, Geo. J.	do	do	do	Do.
Shelton, Willis C.	do	Jan. 26, 1906	do	Do.
Stephenson, A. H.	do	do	do	Do.
Storts, J. D.	do	Jan. 26, 1906	Feb. 8, 1906	\$75 per month.
Thomas, George	do	Jan. 27, 1906	Jan. 31, 1906	\$100 per month.
W. A. J.	do	Jan. 26, 1906	Feb. 15, 1906	Do.
W. D. H. C.	do	Jan. 26, 1906	Feb. 7, 1906	Do.
W. Gaby, John W.	do	Jan. 25, 1906	do	Do.
Williams, Burton	do	Jan. 26, 1906	Jan. 31, 1906	\$75 per month.
Young, Frank C.	do	Jan. 25, 1906	do	\$100 per month.

On motion the appointments were approved.

A number of promotions recommended by the chief engineer in his several communications dated, respectively, January 10, 11, and 13, 1906, were approved, subject to any necessary action by the Civil Service Commission. The list is as follows:

Name.	Promotion.	Takes effect.
Aced, E. A.	From timekeeper, \$100, to chief timekeeper, \$125.	Jan. 1, 1906
Allgood, Edward P.	From foreman, \$100, to foreman, \$125.	Do.
Banta, Earl J.	From clerk, \$100, to general foreman, \$125.	Do.
Custel, R. G.	From clerk, \$100, to clerk, \$125.	Do.
Downey, P. J.	From general foreman, \$100, to general foreman, \$125.	Do.
Gasparini, Chas.	From foreman, \$75, to general foreman, \$100.	Do.
Lorenz, Upton	From general foreman, \$125, to supervisor, \$150.	Do.
McFarland, E. C.	From clerk, \$100, to clerk, \$125.	Do.
Parker, Chas. L.	From clerk, \$83.33, to clerk, \$100.	Do.
Paterson, E. T.	From clerk, \$125, to chief clerk, \$140.	Do.
Sorrell, Otto D.	From foreman, \$100, to foreman, \$125.	Do.
Stockelburg, C. L.	From general foreman, \$125, to supervisor, \$150.	Do.
Van Dusen, R. L.	From clerk, \$125, to chief clerk, \$150.	Do.

At 4.40 p. m. the meeting adjourned.

SEVENTY-FOURTH MEETING.

EVENING STAR BUILDING,
Washington, D. C., February 4, 1906.

The Commission met at the call of the chairman at 2.30 p. m.

Present: Chairman Walker, Messrs. Harrod and Grunsky.

Absent: General Davis, Messrs. Parsons and Burr, on duty on the Isthmus of Panama.

The minutes of the meeting of January 31, 1905, were read and approved.

The chairman called attention to the fact that owing to unfavorable conditions prevailing on the Isthmus of Panama he had directed that two additional shipments of 2,000 pounds each of insect powder be made after existing orders had been filled.

In the matter of commutation of quarters to employees of the Commission in the Canal Zone, Mr. Grunsky offered the following:

Whereas it appears that an allowance of eight per centum of the salaries of employees on the Isthmus is an inadequate commutation and insufficient to recompense them for expenses incurred in renting suitable rooms, rents having been advanced unreasonably, particularly in the city of Panama: Therefore, be it

Resolved, That as a temporary measure, effective from February 1, 1905, to the close of the year 1905, commutation for quarters will be allowed at the rate of fifteen per centum of the salary; that on and after January 1, 1906, the commutation for quarters, unless otherwise ordered, will be eight per centum, and that whenever quarters are offered by the Commission to any employee, whether accepted or not, the commutation for quarters shall cease.

The resolution was adopted.

Relative to recent suggestions from Governor Davis, Chief Engineer Wallace, and Mr. E. C. Tobey, chief of department of material and supplies, requesting the establishment in the Canal Zone of branches of the Young Men's Christian Association and the establishment of rest houses and food stations by the Salvation Army, it was, on motion of Mr. Harrod—

Resolved, That the correspondence relating to the establishment in the Canal Zone of branches of the Young Men's Christian Association and of the Salvation Army be referred to a committee, who shall report what assistance, if any, it is proper and desirable for the Canal Commission to render.

The amendment to the plan of organization for Colon Hospital, proposed by Dr. L. W. Spratling, superintendent Colon Hospital, in his letter of December 10, 1905, with favorable report of Colonel Gorgas, chief sanitary officer, forwarded by Governor Davis under date of December 16, 1905, for action of the Commission, was discussed, and Mr. Grunsky offered the following:

Resolved, That in lieu of the pharmacy employees authorized for Colon Hospital, the employment of one druggist at \$100 per month, one assistant druggist at \$75 per month, and one dispensary scrubber at \$20 per month, with quarters and board, be authorized.

On motion of Mr. Harrod, the resolution was adopted.

In the matter of Governor Davis's recommendations contained in his letter of January 17, 1905, respecting the disposal of night soil, the copy of specifications for daily removal of same and communication from Colonel Gorgas, chief sanitary officer, with estimate cost of proposed bucket system, Mr. Grunsky, from the committee on sanitation, reported as follows:

The disposal of night soil on the Isthmus at all points between Panama and Colon is discussed in the communication from Governor Davis above alluded to. The committee on sanitation is strongly of the opinion that the views of Governor Davis in this matter are correct; that wherever practicable privy vaults or pits should be used, and that the fecal matter collected in vessels should be thrown into these vaults. In the construction of these vaults care should be taken to locate them where they are least likely to be filled during storms by surface drainage and the excavated material should be thrown on the up-hill side. They should be of a temporary character, to be filled with earth when abandoned. It may be well to require a layer of dry earth to be

deposited in each such vault from time to time. If necessary, curbing may be of wood similar to red cypress or redwood, which resist decay fairly well, and should be constructed with close joints near the surface of the ground. The curb on the up-hill side should rise some inches above the ground's surface, and earth should be well banked against it to turn away surface drainage. Simple, well-constructed shelters should be erected over the pits and should be inspected by the sanitary department from time to time.

The system introduces no new element of danger. It reduces the probability of such disease germs as those of typhoid fever reaching the streams. Moreover, it will not be many years before good drinking water from Gamboa or Alhajuela Lake will be supplied to all the inhabitants along the canal line, so that even contaminated waters would be but an unimportant menace to the public health.

The committee submits the foregoing with the suggestion that it be at once transmitted to the chief sanitary officer for his comments, and to Governor Davis for any additional suggestions he may desire to make. In the meanwhile the night-soil cans already purchased should be put into use where most needed and likely to be required for some time. As soon as replies are received from the Isthmus the committee will offer suitable resolutions and amendments to the Canal Zone laws if such be required.

The report was approved and adopted.

The purchase of 50,000 ties 6 by 8 inches by 8 feet, of 50,000 ties 7 by 9 inches by 9 feet, and of 4,800 switch ties from Messrs. Brown Island, New York, dated February 2, 1905, relating to his patent 1905, was authorized.

A communication from James J. Powers, of Central Park, Long Island, New York, dated February 2, 1905, relating to his patent antiseptic chlorinating apparatus for disinfecting garbage, infected matter, etc., was ordered referred to the chief sanitary officer.

Consideration was given Governor Davis's letter of January 21, 1905, respecting the sanitation of Panama and Colon, asking whether mosquito work, such as cleaning water containers, draining places where mosquitos breed, the destruction of larvæ and of the mature insects by fumigation, should be classed as sanitation, and asking also whether the Comptroller of the Treasury would pass vouchers showing expenditures for mosquito work. Governor Davis inclosed copy of communication from the chief sanitary officer to the Secretary of War respecting the same subject, and also copy of letters from the minister of the Republic of Panama.

The matter was ordered to the general counsel for examination and report.

The chairman announced the detail to the Commission of Maj. Hugh J. Gallagher, of the General Staff, U. S. Army, by direction of the President, and that on the 1st of February he had assigned him in charge of duties of purchasing and shipping supplies to the Isthmus. The chairman further stated that Major Gallagher's army pay, including allowances, was \$4,075.80 per annum. The question of compensation to Major Gallagher by the Commission and of his proper designation was referred to the executive committee for report at an early date.

The chairman announced the appointment of Mr. Robert R. West as deputy auditor for service on the Isthmus of Panama, at a salary of \$4,000 per annum, commencing February 4, 1905; that Mr. West had taken the oath of office and would shortly leave for the Isthmus.

In response to inquiry from Mr. Grunsky, the chairman stated that the Panama Railroad Company was the lowest bidder for transportation of the 200 flat cars purchased from the Standard Steel Car Com-

pany, of Pittsburg, that contract for carrying same had been awarded that company, and it is understood that the cars would be delivered on the Isthmus by the 1st of April, 1905.

The chairman announced the following appointments made by him since January 31, 1905:

For service on the Isthmus of Panama.

MATERIAL AND SUPPLIES DEPARTMENT.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.
Brett, Wm. H.	Clerk	Jan. 31, 1905	Feb. 7, 1905	\$100 per month.
Burke, Jno.	Travelling inspector	Feb. 1, 1905	Feb. 8, 1905	\$200 per month.
Haddock, R. W.	Stock clerk	Feb. 2, 1905	Feb. 28, 1905	\$1,000 per year.
Jeffries, P. M.	Lumber clerk	do	Feb. 15, 1905	\$1,000 per year.
Leslyard, Wm. B.	Storekeeper	Jan. 31, 1905	Feb. 7, 1905	Do.
McCall, C. Horace	Assistant commissary	Feb. 2, 1905	Feb. 15, 1905	\$2,500 per year.
Norton, Chas. B.	Stock-ledge clerk	Feb. 3, 1905	Feb. 11, 1905	\$1,000 per year.
Vanzant, C. L.	Freight checker	Jan. 31, 1905	Feb. 7, 1905	\$900 per year.

HEALTH DEPARTMENT.

Ellner, Mrs. May	Nurse	Feb. 1, 1905	Feb. 7, 1905	\$70 per month.
Platt, G. H.	Ward attendant	Feb. 2, 1905	do	Do. a

ENGINEERING DEPARTMENT.

Jackson, W. L.	Building superintendent	Feb. 1, 1905	Feb. 18, 1905	\$150 per month.
Miracle, F. W.	Stenographer	Feb. 3, 1905	Feb. 15, 1905	\$1,200 per year.
Culson, Jno. W.	Blacksmith	Feb. 2, 1905	do	45 cents per hour.
Berry, Eli.	Carpenter	Feb. 3, 1905	do	\$75 per month.
Bond, Correll W.	do	Feb. 1, 1905	Feb. 7, 1905	Do.
Butterfield, L.	do	Jan. 31, 1905	do	\$100 per month.
Canoles, G. H. B.	do	Feb. 2, 1905	Feb. 15, 1905	Do.
Felton, Alex.	do	do	Feb. 11, 1905	Do.
Forster, H. W.	do	Feb. 3, 1905	Feb. 7, 1905	Do.
Kellar, C. E.	do	Feb. 1, 1905	Feb. 15, 1905	Do.
Lattimore, B. W.	do	Jan. 31, 1905	Feb. 11, 1905	Do.
Maddock, Chas. H.	do	do	Feb. 7, 1905	Do.
Sinclair, Ralph B.	do	Feb. 2, 1905	Feb. 11, 1905	Do.
Von Baumgarten, C.	do	do	do	Do.
Dovall, P. J.	Machinist	Feb. 2, 1905	Feb. 7, 1905	45 cents per hour.
Enberg, F. C.	do	Feb. 1, 1905	do	Do.
McKnight, Wm.	do	Feb. 2, 1905	Feb. 22, 1905	Do.
Nelson, Chas. J.	do	do	Feb. 15, 1905	Do.
Schilling, Wm.	do	Feb. 1, 1905	Feb. 7, 1905	Do.
Belcher, Eugene	Steam and air drill workman	Feb. 2, 1905	Feb. 15, 1905	\$83.33 per month.
Lawrence, Frank	do	Feb. 1, 1905	Feb. 7, 1905	Do.
Masterton, Dickson	do	do	Feb. 15, 1905	\$75 per month.
Murphy, John J.	do	do	Feb. 7, 1905	\$83.33 per month.

a Colombian silver.

On motion of Mr. Harrod, the appointments were approved, subject to the action of the Civil Service Commission.

The chairman presented the following report of the chief engineer covering appointments, resignations, discharges, etc., for week ending January 14, 1905, which, on motion of Mr. Grunsky, was approved, subject to the action of the Civil Service Commission:

Robert R. West
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Appointments, promotions, etc., for week ending January 14, 1905.

ENGINEERING DEPARTMENT.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.	Remarks.
Amador, J.	Copyist.	Jan. 9, 1905	Jan. 9, 1905	\$75 per month.	To general quartermaster.
Anger, G. F.	Craftsman.	Jan. 3, 1905	Jan. 4, 1905	\$165 per month.	To division engineer, Cuba.
Armstrong, F.	Machinist.	Jan. 2, 1905	Jan. 2, 1905	45 cents per hour.	To mechanical engineer, Panama.
Arnold, R. D.	General foreman.	Jan. 2, 1905	Jan. 2, 1905	\$100 per month.	Discharged.
Beaucourt, R.	Assistant foreman.	Jan. 1, 1905	Jan. 9, 1905	\$80 per month.	To supervising architect.
Bogert, H. V.	Carpenter foreman.	Dec. 18, 1904	Jan. 4, 1905	\$100 per month.	Do.
Burgher, Jos.	Do.	Dec. 28, 1904	Jan. 1, 1905	Do.	To resident engineer, Cristobal.
Caldwell, G. A.	Levellers.	Dec. 28, 1904	Jan. 1, 1905	Do.	Reduced from \$125 per month.
Carmichael, E. S.	Draftsman.	Dec. 28, 1904	Jan. 1, 1905	\$93.33 per month.	Promoted from \$75 per month.
Carter, F. W.	Rodman, grade 2.	Dec. 28, 1904	Jan. 1, 1905	Do.	Reduced from \$125 per month.
Clay, W. H.	Leveller, grade 1.	Dec. 28, 1904	Jan. 1, 1905	\$100 per month.	To mechanical engineer.
Cummings, E. C.	Master mechanic.	Dec. 28, 1904	Jan. 1, 1905	\$330 per month.	Do.
Cunningham, B.	Machinist.	Dec. 28, 1904	Jan. 1, 1905	45 cents per hour.	Do.
Davidson, R. N.	Rodman, grade 1.	Dec. 28, 1904	Jan. 1, 1905	\$75 per month.	Promoted from chainman at \$60.
Davis, B.	Machinist.	Dec. 28, 1904	Jan. 1, 1905	45 cents per hour.	To mechanical engineer.
Dawson, E. R.	Assistant foreman.	Dec. 28, 1904	Jan. 1, 1905	\$60 per month.	Promoted from \$75 per month.
Drake, R. L.	Draftsman.	Dec. 28, 1904	Jan. 1, 1905	\$60 per month.	Promoted from \$40 per month.
Hamill, Gus.	Assistant foreman, grade 2.	Dec. 28, 1904	Jan. 1, 1905	\$60 per month.	To mechanical engineer.
Healy, R.	Machinist.	Dec. 28, 1904	Jan. 1, 1905	45 cents per hour.	Promoted from \$60 per month.
Holcomb, W.	Steam-shovel engineer.	Dec. 28, 1904	Jan. 1, 1905	\$90 per month.	To mechanical engineer.
Hoskins, C. B.	Machinist.	Dec. 28, 1904	Jan. 1, 1905	45 cents per hour.	To division engineer, Cuba.
Hoskins, J. M.	Do.	Dec. 28, 1904	Jan. 1, 1905	45 cents per hour.	To mechanical engineer.
Irwin, E. E.	Assistant foreman.	Dec. 28, 1904	Jan. 1, 1905	\$60 per month.	Promoted from 15 cents silver per hour.
Jerry, E. N.	Machinist.	Dec. 28, 1904	Jan. 1, 1905	45 cents per hour.	To mechanical engineer.
Julio, Chas.	Messenger.	Dec. 28, 1904	Jan. 1, 1905	\$25 per month.	Do.
La Sante, Geo.	Foreman, grade 2.	Dec. 28, 1904	Jan. 1, 1905	\$75 per month.	To division engineer, Cuba.
Lean, E.	Rodman, grade 1.	Dec. 28, 1904	Jan. 1, 1905	\$60 per month.	Promoted from \$75; 7 month.
Mathews, J. A.	Machinist.	Dec. 28, 1904	Jan. 1, 1905	\$60 per month.	Reassigned.
Morley, C. C.	Foreman, grade 2.	Dec. 28, 1904	Jan. 1, 1905	\$70 per month.	To mechanical engineer.
Murphy, A.	Foreman.	Dec. 28, 1904	Jan. 1, 1905	\$60 per month.	Do.
Neubert, A.	Machinist.	Dec. 28, 1904	Jan. 1, 1905	\$60 per month.	To division engineer, Cuba.
Paquette, A.	Foreman, min.	Dec. 28, 1904	Jan. 1, 1905	\$60 per month.	To mechanical engineer.
Perkins, Percy.	Carpenter foreman.	Dec. 28, 1904	Jan. 1, 1905	\$60 per month.	Reassigned to department material and exp.
Perry, John H.	Draftsman.	Dec. 28, 1904	Jan. 1, 1905	\$60 per month.	To division engineer, Cuba.
Pingrey, R. E.	Machinist.	Dec. 28, 1904	Jan. 1, 1905	\$60 per month.	Promoted from 40 cents silver per hour.
Riley, J.	Rodman, grade 1.	Dec. 28, 1904	Jan. 1, 1905	\$60 per month.	To division engineer, Cuba.
Rowe, Hartley.	Timekeeper.	Dec. 28, 1904	Jan. 1, 1905	\$75 per month.	To supervising architect.
Smith, E.	Foreman, grade 1.	Dec. 28, 1904	Jan. 1, 1905	Do.	Do.
Smook, R. E.	Steam shovel foreman.	Dec. 28, 1904	Jan. 1, 1905	Do.	To mechanical engineer.
Snyder, W. H.	Assistant timekeeper.	Dec. 28, 1904	Jan. 1, 1905	Do.	Reassigned.
Sagan, W.	Assistant timekeeper.	Dec. 28, 1904	Jan. 1, 1905	\$40 per month.	To division engineer, Cuba.
					Discharged.
					Promoted from 15 cents silver per hour.

Do.
To mechanical engineer.
Retired.
To division engineer, Colombia.
Do.
Discharged.
Promoted from 15 cents over per hour.

Jan. 11, 1905 \$150 per month
Jan. 2, 1906 45 cents per hour
Jan. 11, 1906 \$75 per month
Jan. 7, 1905 do.
Jan. 4, 1905 do.
Jan. 9, 1905 do.
Jan. 1, 1906 \$30 per month

Do.
Jan. 2, 1906
Jan. 7, 1905
Jan. 2, 1905
Jan. 1, 1906

Draftsman
Machinist
Rodman, grade 1
Timekeeper
Steam shovel fireman
Foreman, grade 1
Assistant timekeeper

Finney, R. E.
Riley, J.
Bowe, Hartley
Smith, E.
Smoot, R. E.
Snyder, W. H.
Sogan, W.

Sutherland, P.
Sutton, J.
Taylor, J. O.
Thompson, E. P.
Warren, John
Warren, R.
Wehrill, J. F.

Dec. 28, 1904
Dec. 28, 1904
Dec. 28, 1904
Dec. 15, 1904
Dec. 15, 1904
Dec. 28, 1904
Dec. 28, 1904

Chairman
Assistant foreman
Draftsman
Clerk, class 3
Foreman, min.
do.
Draftsman

Jan. 11, 1906
Feb. 1, 1906
Jan. 4, 1905
do.
do.
Jan. 11, 1905

To resident engineer, Cristobal.
Resigned.
Promoted from \$75 per month
To resident engineer, Cristobal.
To division engineer, Colombia.
Do.
To supervising architect

Dec. 28, 1904 \$20 per month
Jan. 11, 1906 \$50 per month
Feb. 1, 1906 \$53.33 per month
Jan. 4, 1905 \$125 per month
do. \$100 per month
do. do.
Jan. 11, 1905 \$150 per month

The appointment of Vernon Henriquez as levelman at \$100 per month gold, to take effect January 7, 1905; of C. E. Morrice as time-keeper at \$100 per month gold, and of W. J. Williams as general foreman at \$100 per month gold, reported by the chief engineer in his letters of January 17 and 20, were approved, subject to action of the Civil Service Commission.

The recommendation of the chief of the material and supplies department of January 20, for promotion of the following named, was approved: G. Morbotin, clerk, from \$99.71 per month to \$125 per month; C. D. McCarn, stenographer, from \$100 per month to \$125 per month.

The appointments of Artistide Alfaro, clerk, at \$60 per month gold, from January 24, 1905, and E. W. Fraser, clerk, at \$75 per month gold, recommended by the chief of department of material and supplies, were confirmed, subject to the action of the Civil Service Commission.

The chairman called attention to the communication from Governor Davis, dated January 20, 1905, respecting the erection of barracks for troops stationed on the Isthmus, and inclosed copy of letter of chief engineer on same subject.

A communication from Mr. E. A. Drake, vice-president Panama Railroad Company, dated January 31, 1905, transmitting copy of letter of Mr. J. E. Shaler, general superintendent Panama Railroad, concerning certain damage and inconvenience to tenants of the railroad company evicted to provide location for hospital service and wireless telegraph station.

A letter from Governor Davis, dated January 24, 1905, suggesting that with the discontinuance of the position of director of hospitals there will be required an increased clerical force for the office of the chief sanitary officer and specifying the nature of the positions to be created. The matter was held under advisement pending the receipt of report from the chief sanitary officer.

The request of the Colon Electric and Ice Supply Company for indemnity for loss sustained on account of a purchase by that company of the plant, buildings, and lease of the Colon Electric Illuminating Company, with the adverse report of Mr. J. M. Keedy, prosecuting attorney of the Canal Zone, therein, forwarded by Governor Davis under date of January 23, 1905, with expression of opinion concurring in the views of Mr. Keedy, was ordered referred to the general counsel for examination and report.

Governor Davis's letter of January 23, 1905, with notification of appointment of Mr. W. W. MacNeill, postmaster at Cristobal, as mayor of that municipality, vice Mr. Juan de la Guardia, resigned, was considered.

On motion of Mr. Grunsky, the increase of salary of Mr. MacNeill as postmaster at Cristobal to \$150 per month was approved, and his appointment as mayor of the municipality of Cristobal, without pay, was confirmed, as recommended by Governor Davis.

Governor Davis's letter of January 21, 1905, as to amending the instructions of the Commission of August 28, 1904, in regard to pay patients in the hospitals at Ancon and Colon and surgical treatment in those hospitals, with an accompanying copy of letter from Colonel Gorgas, chief sanitary officer, in regard to the same, was read.

On motion of Mr. Harrod, the resolution proposed by Governor Davis, as follows, was adopted:

Resolved, That any pay patient can employ any physician desired by such patient, and such physician can have access to such patient and use of all supplies and conveniences of the hospital, under regulations to be prescribed. A charge of not less than \$5 and not more than \$10 will be made for the use of the operating room.

In case a pay patient in a hospital elects to have a physician employed by the Commission attend him or her, the superintendent shall charge for such attendance or surgical operation in accordance with a scale of fees to be agreed upon between the chief sanitary officer on the one hand and the legally qualified medical men of Panama and Colon on the other.

Governor Davis's letter of January 23, 1905, transmitting translation of letter from Mr. Narciso Garay, of Panama, and copy of reply thereto, respecting lands ownership of which is claimed by Manuel Jose Hurtado and certain heirs at law of his brothers and sisters in the Canal Zone, and asking for instruction as to the action to be taken, was referred to the general counsel for examination and report.

The chairman read a communication from Mr. E. C. Tobey, chief of department of material and supplies, relating to the transfer of the commissary of the Panama Railroad Company, asking for decision regarding the ice plant and for authority to establish commissary branch at Ancon.

The chairman stated that the question of transferring ice plant from the Panama Railroad Company is now under consideration. The establishment of a branch commissary at Ancon was approved.

The chairman read a communication from Mr. E. A. Drake, vice-president Panama Railroad Company, dated February 2, 1905, suggesting that employees of the railroad company be treated at the hospital at Ancon at the rate of \$1 per day, the same rate as prevails in the hospital at Colon. It was resolved that employees of the railroad company be treated in any of the hospitals of Colon at the rate of \$1 per day.

On motion of Mr. Grunsky, it was resolved to approve the request of Colonel Gorgas, chief sanitary officer, forwarded with approval of Governor Davis, under date of January 21, 1905, that in lieu of 30 ward attendants at Ancon Hospital at a salary of \$25 gold per month, with board and lodging, there be allowed 20 ward attendants at \$25 gold per month, with board and lodging, and 10 "class 2" attendants at \$30 gold per month, with board and lodging.

The request of Chief Engineer Wallace, contained in his letter of January 17, 1905, for the detail to the engineering department of Lieut. Robert E. Wood, Third U. S. Cavalry, stationed at West Point, was taken under advisement.

The chief engineer's letter of January 12, 1905, respecting rates of pay and promotions from grade to grade, was ordered held for further consideration.

The letter of Mr. E. C. Tobey, chief of department of material and supplies, of January 14, 1905, with copy of letter of the chief engineer and W. E. Dauchey, division engineer, as to probable supply of explosives needed for the year 1905, were referred to Mr. Harrod for examination and report.

Letter of chief of department material and supplies, dated January 16, 1905, transmitting copy of letter of chief sanitary officer, with cost of items omitted from requisition of August 19, 1904, for medical

supplies for 10,000 men for three months, was ordered referred to the purchasing agent, with direction to have purchase made in the usual manner.

The chairman read for information of the Commission the following communications:

From Governor Davis, dated December 27, 1904, respecting door and window screens for the Ancon Hospital and the delay in obtaining same.

From Governor Davis, dated January 17, 1905 acknowledging receipt of copy of resolutions adopted by the Commission December 22, 1904, respecting the delimitation line of Canal Zone near the city of Panama, and as to the acquisition of portions of the Domingo Diaz property.

From Governor Davis, dated January 17, 1905, relating to health conditions on the Isthmus of Panama, inclosing a copy of letter of Dr. Lewis Balch, health officer at Panama, addressed to Hon. John Barrett, United States minister to Panama; copy of letter addressed to minister of Panaman Government by Governor Davis, and copy of letter from chairman of the Commission addressed to the Secretary of War.

From Governor Davis, dated January 18, 1905, inclosing copies of letters of Mr. Tom M. Cooke, director of posts, and Dr. Louis A. La Garde, superintendent of Ancon Hospital, relative to short-paid postage stamps and the use by the Panama Railroad Company of penalty envelopes.

From Governor Davis, dated January 20, 1905, referring to former communication of January 17, 1905, containing information as to the submission of a draft of the proposed sanitary regulations for the cities of Panama and Colon. Letter was accompanied by translation of a letter from the minister of foreign affairs, communication of Governor Davis to Colonel Gorgas, chief sanitary officer, and copies of sanitary rules and regulations for the cities of Panama and Colon, pursuant to article 7 of the convention between the Republic of Panama and the United States.

From Governor Davis, dated January 20, 1905, respecting the furnishing of information by a subordinate officer of the sanitary department to the American minister to Panama, inclosing copy of letters addressed to the Secretary of State by Hon. John Barrett, United States minister to Panama, memorandum of yellow-fever case submitted to Minister Barrett by Doctor Carter, chief quarantine officer of Panama, etc.

From Governor Davis, dated January 21, 1905, inclosing copy of letter from E. C. Tobey, chief of department of material and supplies, relative to charges for supplies issued to the Isthmian Canal Commission and its employees from the railroad commissary.

From Governor Davis, dated January 21, 1905, with copy of letter of Osceola Kyle, justice of the supreme court, Canal Zone, regarding his leave of absence for six weeks with pay, and also containing suggestions as to properly filling that vacancy arising in case of Judge Kyle's resignation.

From Chief Engineer Wallace, dated January 16, 1905, suggesting that the question of increasing the efficiency of the Panama Railroad Company be taken up and discussed with the directors of that organization.

From Chief Engineer Wallace, dated January 20, 1905, respecting his efforts to secure additional labor in Nicaragua and the West Indies, and reporting that up to date of his letter about 400 laborers from all sources had been secured through such efforts.

From Chief Engineer Wallace, dated January 21, 1905, reporting the result of the excavation operations in Culebra cut for the six months ending December 31, 1904, showing the amount and cost of material excavated and removed during that period.

From Mr. A. W. Brooks, of Augusta, Me., addressed to Hon. William P. Frye, United States Senate, respecting sanitary conditions on the Isthmus of Panama, etc.

There being no further business, the Commission adjourned at 4.30 p. m., to meet at the call of the chairman.

SEVENTY-FIFTH MEETING.

EVENING STAR BUILDING,
Washington, D. C., February 10, 1905.

The Commission met at the call of the chairman at 10.15 a. m.

Present: Chairman Walker, Messrs. Harrod and Grunsky.

Absent: General Davis, Messrs. Parsons and Burr, on duty on the Isthmus of Panama.

The minutes of the meeting of February 4, 1905, were read and approved.

The chairman announced the following appointments as having been made since the meeting of February 4, 1905:

For service on the Isthmus of Panama.

MATERIAL AND SUPPLIES DEPARTMENT.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.
Delbert, Geo. S.	Stenographer and typewriter.	Feb. 4, 1905	Feb. 15, 1905	\$1,200 per year.
Goldstein, Barnett H. .	Typewriter	Feb. 9, 1905	do	Do.
Wilson, Lewis E.	Clerk	Feb. 7, 1905	Feb. 22, 1905	Do.
White, S. Morgan	Ship fitter	Feb. 6, 1905	Feb. 15, 1905	45 cents per hour.
Cooper, Jacob J.	Foreman laborers	Feb. 7, 1905	do	\$1,000 per year.
Coyne, John	do	Feb. 4, 1905	Feb. 7, 1905	Do.

HEALTH DEPARTMENT.

Jones, Oliver	Ward attendant	Feb. 7, 1905	Feb. 22, 1905	\$25 per month.
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DEPUTY AUDITOR'S OFFICE.

West, Robert R.	Deputy auditor	Jan. 24, 1905	Jan. 24, 1905	\$4,000 per year.
West, William K.	Accountant	Feb. 9, 1905	Feb. 9, 1905	\$1,500 per year.

ENGINEERING DEPARTMENT.

Acheson, Wm. M.	Levelman	Feb. 7, 1905	Feb. 15, 1905	\$125 per month.
Craft, C. P.	Rodman	do	Feb. 21, 1905	\$83.33 per month.
De La Vergne, J. C.	do	Feb. 4, 1905	Feb. 15, 1905	Do.
Millen, Clark	do	do	do	Do.
Thompson, Wm. G.	do	do	Feb. 21, 1905	Do.
Duckworth, J. T.	Work train conductor	do	Feb. 15, 1905	\$100 per month.
Mann, W. H.	do	do	do	Do.

For service on the Isthmus of Panama—Continued.

ENGINEERING DEPARTMENT—Continued.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.
McDonald, F. P.	Switch-engine man	Feb. 7, 1905	Feb. 15, 1905	\$115 per month.
Vickroy, E. A.	do	Feb. 6, 1905	do	\$100 per month.
Smith, Geo. A.	Trainman	Feb. 9, 1905	Feb. 21, 1905	\$75 per month.
Seofield, W. H.	Yardmaster	Feb. 4, 1905	Feb. 15, 1905	\$150 per month.
Armiger, Geo.	Switchman	do	do	\$160 per month.
Curran, Taylor	Locomotive machinist	do	Feb. 7, 1905	45 cents per hour.
Long, R. O.	do	Feb. 9, 1905	Feb. 24, 1905	Do.
Engelhofe, J. J.	Machinist	Feb. 6, 1905	Feb. 15, 1905	Do.
Jensen, Rudolph	do	Feb. 9, 1905	Feb. 21, 1905	Do.
Jordan, Chas.	do	Feb. 6, 1905	Feb. 22, 1905	Do.
Oetli, Chas.	do	do	Feb. 15, 1905	Do.
Bradley, Chas. J.	Boiler maker	do	do	Do.
Bush, Rol. H.	Pipe fitter	do	do	50 cents per hour.
Hundt, V. R.	do	Feb. 9, 1905	Feb. 21, 1905	45 cents per hour.
Smith, P. H.	do	Feb. 7, 1905	do	Do.
Ernest, W. A.	Steam and air drill workman.	Feb. 9, 1905	Feb. 28, 1905	\$100 per month.
Garbutt, Thos.	do	Feb. 4, 1905	Feb. 15, 1905	\$83.33 per month.
Lyons, Sam	do	do	Feb. 11, 1905	Do.
Blishborough, Robt	Carpenter	Feb. 7, 1905	Feb. 15, 1905	\$100 per month.
Stevens, Fletcher	do	do	Feb. 28, 1905	Do.
Warren, Joe. J.	do	Feb. 9, 1905	Feb. 21, 1905	Do.
Williams, W. E.	do	Feb. 7, 1905	do	\$75 per month.
Crowley, D. J.	Blacksmith	Feb. 9, 1905	do	45 cents per hour.
Dube, Isidore H.	do	do	do	Do.
Dunwoody, T. J.	do	Feb. 7, 1905	Feb. 15, 1905	Do.
McGregor, S. A.	do	Feb. 9, 1905	Feb. 21, 1905	Do.
Underwood, C. W.	do	do	do	Do.
Williams, A. S.	do	do	Feb. 22, 1905	Do.

On motion of Mr. Grunsky, the appointments were confirmed, subject to the action of the Civil Service Commission.

The chief engineer's report of appointments, promotions, resignations, etc., for the week ending January 21, 1905, was approved, subject to civil-service regulations. The report is as follows:

Appointments, promotions, etc., for week ending January 21, 1905.

ENGINEERING DEPARTMENT.

Name.	Position.	Date of appointment.	Taxes effect.	Rate of pay.	Remarks.
Ashman, E.	Molder	Dec. 23, 1904	Jan. 14, 1905	45 cents per hour	To mechanical engineer.
Aubrey, T. G.	Minor foreman	Dec. 24, 1904	Jan. 17, 1905	\$100 per month	To division engineer, Culebra.
Bernhardt, J. E.	Machinist	Dec. 24, 1904	Jan. 17, 1905	45 cents per hour	To mechanical engineer.
Bucknell, Wm. S.	Carpenter foreman	Dec. 31, 1904	Jan. 10, 1905	\$100 per month	To supervising architect.
Charles, G. L.	Clerk, class 3	Dec. 25, 1904	Jan. 18, 1905	\$125 per month	To mechanical engineer.
Clarke, G.	Foreman, grade 1	Dec. 25, 1904	Jan. 18, 1905	\$75 per month	To engineer waterworks and sewers.
Clifford, M. F.	Clerk, class 3	Dec. 25, 1904	Jan. 18, 1905	\$125 per month	To chief engineer.
Corrigan, J. A.	Carpenter	Jan. 6, 1905	Jan. 10, 1905	\$100 per month	To supervising architect.
Cowan, A. G.	Clerk, class 1	Dec. 24, 1904	Jan. 11, 1905	\$83.33 per month	Promoted from \$75 per month.
Dornier, Fritz	Machinist	Dec. 24, 1904	Jan. 11, 1905	45 cents per hour	To mechanical engineer.
Ducey, Wm. J.	Carpenter	Jan. 4, 1905	Jan. 10, 1905	\$75 per month	To supervising architect.
Fisher, J. F.	Foreman, grade 2	Jan. 4, 1905	Feb. 1, 1905	\$83.33 per month	Promoted from \$75 per month.
Gaudin, H.	Assistant timekeeper	Jan. 4, 1905	Jan. 5, 1905	\$80 per month	Promoted from \$50 per month.
Gaudy, Joe	Assistant foreman	Jan. 4, 1905	Feb. 1, 1905	\$60 per month	Promoted from \$75 per month.
Guarini, N.	General foreman	Jan. 4, 1905	Jan. 10, 1905	\$100 per month	To supervising architect.
Hall, H. A.	Carpenter foreman	Jan. 4, 1905	Jan. 10, 1905	do	Promoted from \$25 per month.
Hernandez, J. R.	Assistant timekeeper	Dec. 24, 1904	Jan. 11, 1905	\$50 per month	To division engineer, Culebra.
Herrick, F. S.	Foreman, grade 1	Dec. 24, 1904	Jan. 11, 1905	\$75 per month	Resigned.
Homeswood, C.	Machinist	Dec. 24, 1904	Jan. 11, 1905	\$100 per month	Promoted from \$75 per month.
Kencke, A.	Plumber	Dec. 24, 1904	Jan. 11, 1905	45 cents per hour	To mechanical engineer.
Knab, R.	Machinist	Dec. 24, 1904	Jan. 11, 1905	\$100 per month	Resigned.
Leza, Wm. C.	Assistant timekeeper	Dec. 24, 1904	Jan. 11, 1905	\$100 per month	To supervising architect.
Malone, D.	Foreman, grade 1	Dec. 24, 1904	Jan. 11, 1905	45 cents per hour	Resigned.
McClintick, C. H.	Plumber	Dec. 24, 1904	Jan. 11, 1905	\$75 per month	To division engineer, Culebra.
McDill, J. J.	Plumber	Dec. 24, 1904	Jan. 11, 1905	45 cents per hour	To supervising architect.
O'Mally, J.	Carpenter foreman	Dec. 24, 1904	Jan. 11, 1905	\$100 per month	Resigned.
O'Neill, J.	do	Dec. 24, 1904	Jan. 11, 1905	do	To division engineer, Culebra.
Pendergrass, G. W.	Assistant foreman	Dec. 24, 1904	Jan. 11, 1905	\$100 per month	To supervising architect.
Proctor, A. W.	Carpenter foreman	Dec. 24, 1904	Jan. 11, 1905	\$100 per month	To resident engineer, Cristobal.
Rold, H. M.	Clerk, class 2	Dec. 24, 1904	Jan. 11, 1905	do	Promoted from \$50 per month.
Scott, S. B.	Clerk, class 3	Dec. 24, 1904	Jan. 11, 1905	do	To supervising architect.
Shackelford, C.	Levelman	Dec. 24, 1904	Jan. 11, 1905	\$125 per month	Resident engineer, Cristobal.
Shonecki, S. V.	Levelman	Dec. 24, 1904	Jan. 11, 1905	\$125 per month	Resigned.
Tabor, J. A.	Levelling agent	Dec. 24, 1904	Jan. 11, 1905	\$100 per month	do.
Tillman, W.	Machinist	Dec. 24, 1904	Jan. 11, 1905	\$250 per month	To chief engineer (one month only).
Yetter, H. P.	Clerk, class 1	Dec. 24, 1904	Jan. 11, 1905	45 cents per hour	To mechanical engineer.
Zuccoli, F.	Assistant foreman	Dec. 24, 1904	Jan. 11, 1905	\$83.33 per month	To general quartermaster.
			Feb. 1, 1905	\$60 per month	Promoted from \$50 per month.

The recommendation of Mr. Wallace, contained in his letter of January 25, 1905, for the promotion of William Lindsay from foreman first grade, at \$75 gold per month, to foreman second grade, at \$100 gold per month, was approved, subject to civil-service regulations.

The chairman read a communication from Chief Engineer Wallace, dated January 26, 1905, recommending the revision of circular No. 26 of the Civil Service Commission, dated January 18, 1905, providing for the examination and classification of assistant civil engineers, instrumentmen, transitmen, levelmen, rodmen, and chainmen. The matter was referred to the executive committee.

The chairman laid before the meeting letter from the chief engineer, dated January 24, 1905, transmitting proposition from Dr. Temistocles Bengifo V., of the city of Panama, to furnish labor from Colombia for canal work. On motion, the matter was referred to the executive committee.

The communication of the chief engineer, dated January 28, 1905, quoting telegram from Mr. Dauchy, division engineer at Culebra, asking for authority for the employment of Pat Marty as engine foreman, first grade, at \$100 (gold) per month, to take effect January 27, 1905, and suggesting that a tentative arrangement should be made to obviate the present embarrassing situation regarding the making of temporary appointments provided for in the civil-service rules, was read. After discussion the matter was referred to the chairman, the sense of the meeting being that the chief engineer had power to employ temporarily under the resolution contained in the minutes of the forty-first meeting, held August 27, 1904.

A communication from Johnson & Higgins, insurance brokers, of New York, dated February 9, 1905, asking whether the Commission had decided the question of insurance on the shipments of materials and supplies to the Isthmus of Panama, was referred to the chairman.

The chairman read a letter from S. Bloom & Sons, of San Francisco, Cal., inquiring as to the arrangements for the transmission of freight across the Isthmus of Panama, and as to what are the existing arrangements as to landing a vessel of 500 tons on both sides of the Isthmus. The matter was directed to be referred to Mr. Drake, vice-president of the Panama Railroad Company, to furnish the necessary information.

The chairman read a letter from Mr. Drake, vice-president of the Panama Railroad Company, dated February 9, 1905, respecting the transfer to the Commission of the railroad company's ice plant at Colon. The chairman was directed to communicate with Mr. Tobey, chief of department of material and supplies, in regard to the matter, and to furnish him with a copy of Mr. Drake's letter.

The chairman presented to the meeting a communication from Mr. R. R. West, deputy auditor, addressed to the Commission, and relating to the organization of a clerical force for service in the office of the deputy auditor on the Isthmus of Panama. Regarding Mr. West's recommendation that he be authorized to employ a chief clerk, who shall examine and audit time rolls and pay rolls, at \$2,500 per annum; a clerk as assistant in checking and auditing rolls, at \$1,500 per annum; an accountant to examine and audit claims, invoices, orders, etc., at \$2,000 per annum; a clerk as an assistant, at \$1,500 per annum; a bookkeeper to keep memorandum books, necessary to

prevent duplication of payments, at \$1,500 per annum; a stenographer and typewriter, at \$1,500 per annum, it was, on motion, resolved that organization of the deputy auditor's staff be authorized as suggested, except as to the salary of the chief clerk, which is not to exceed \$2,000 per annum.

The chairman presented the recommendations of Major Gallagher, U. S. Army, purchasing and shipping agent of the Commission, respecting the organization of the department under his supervision. Consideration of the matter was postponed.

Mr. Grunsky, from the committee on sanitation, reported that he had, as directed by the Commission, conferred with Surgeon-General Wyman, of the Public Health and Marine-Hospital Service, and learned that the 10 per cent which his department would charge the Isthmian Canal Commission for attending to the purchase of medical supplies, medicines, and instruments would include inspection, crating, and labor involved in shipping, and that this 10 per cent charge was one already established and charged other departments of the Government purchasing through the Public Health and Marine-Hospital Service. In view of these facts, Mr. Grunsky moved that the offer of the Surgeon-General of the United States Public Health and Marine-Hospital Service to the Isthmian Canal Commission for purchasing medicines, medical supplies, and surgical instruments at a commission of 10 per cent be accepted. This motion was adopted.

The recommendation of the chief of the department of material and supplies, dated February 28, 1905, concerning the rent and repair of the wharf at Colon, the berthing and quick dispatch of vessels, demurrage charges, etc., was held under advisement.

The chairman read the following for the information of the meeting:

Letter from Governor Davis, dated January 26, 1905, transmitting copy of letter of Dr. Lewis Balch, health officer at Panama, respecting claim of Joseph Bryan, of Panama, for indemnity for losses claimed to have been sustained during the fumigation of his premises by the officers of the sanitary department. The chairman stated that the settlement of this matter had been left to Governor Davis, who was fully advised on the 20th ultimo.

Report of Mr. William H. Burr, chairman of engineering committee, dated Ancon, Canal Zone, January 26, 1905, regarding lack of laborers for construction work; that the chief engineer could utilize 1,000 laborers per month for some time to come; that up to the present time but 800 laborers had been secured; confirming cable of January 27, 1905, in regard to advising that authorization be given to W. J. Karner, labor agent, to draw on the treasurer of the Canal Zone for funds to meet expenses incurred in securing labor, and that negotiations for oriental labor should be hastened.

At 1.10 o'clock p. m. the meeting adjourned, subject to the call of the chairman.

SEVENTY-SIXTH MEETING.

EVENING STAR BUILDING,
Washington, D. C., February 13, 1905.

The Commission met at the call of the chairman at 10.20 a. m.

Present: Chairman Walker, Messrs. Harrod and Grunsky.

Absent: General Davis, Messrs. Parsons and Burr, on duty on the Isthmus of Panama.

The minutes of the meeting of February 10 were read and approved.

The chairman read for information a letter from the chief of material and supplies department, dated February 1, 1905, transmitting copy of circular issued to the heads of departments on the Isthmus of Panama respecting the furnishing of commissary supplies to employees.

Governor Davis's letter of January 26, 1905, requesting approval of his action increasing temporarily the salary of Mr. Herman A. Gudger, deputy collector of revenues, to \$1,800 United States currency, in view of the fact that the collection of rents from the lease of lands and buildings and the establishment of schools in the Zone had been transferred to the revenues department, and requesting Mr. Gudger's permanent appointment, was, on motion of Mr. Harrod, referred to the general counsel to submit an amendment to the law permitting the same.

The chairman read a letter from Chief Engineer Wallace, dated February 1, 1905, inclosing copy of memorandum from Captain King, general quartermaster, and recommending that the disbursing officer be instructed to pay vouchers of Mr. Boyd Ehle and party, who had been sent on exploring service; vouchers covering transportation of laborers from Bocas del Toro, and also petty expense accounts. On motion of Mr. Harrod, the matter was referred to the executive committee.

The request of the chief engineer, dated January 28, 1905, for decision on the following paragraph of circular No. 3 of the Commission, dated Washington, D. C., November 3, 1904:

Services of appointees should be terminated only upon written resignation or written discharge. In all cases a copy of the resignation or discharge should be sent to this office.

Mr. Wallace asked, in view of the fact that as there are a large number of men employed on the Isthmus on a gold basis who do not receive appointments, but are put to work without entering into any written contract and paid for what they do, whether they should be designated as "appointees" or "employees," and suggesting that a distinction be made between these terms. Upon motion, the matter was referred to the executive committee.

The chairman presented a memorandum from the Chief of Bureau of Equipment, Navy Department, dated February 3, 1905, respecting the selection of a suitable site for wireless-telegraph station on the Isthmus of Panama, together with copy of his letter addressed to the Secretary of the Navy; letter of the Secretary of the Navy addressed to the Secretary of War, asking that authority be granted the Navy Department to proceed with the construction of the station upon the site selected by the Chief of the Bureau of Equipment. The last-mentioned letter bore the indorsement of the Chief of Bureau of Insular Affairs, stating that the Secretary of War would be pleased to know what interference with the plans of the

Commission there will be if the request of the Navy Department is granted.

The recommendations of Major Gallagher, U. S. Army, purchasing and chipping agent, relative to the organization of his department, were then considered, and, on motion of Mr. Grunsky, it was resolved that the position of assistant purchasing and shipping agent at New York City be created, at a salary of \$2,400 per annum, with a clerk at \$1,200 per annum and a checker at \$600 per annum. Mr. Grunsky also moved that the position of assistant purchasing agent be offered Mr. Alfred Anderson, provided his services can be secured without friction with the Panama Railroad Company. Adopted.

On motion of Mr. Harrod, the salary of the purchasing and shipping agent at Washington was fixed at \$1,800 per annum.

At 11.30 o'clock the meeting adjourned, subject to the call of the chairman.

SEVENTY-SEVENTH MEETING.

EVENING STAR BUILDING,

Washington, D. C., February 14, 1905.

The quarterly meeting of the Commission was called to order by the chairman at 12 o'clock m.

Present: Chairman Walker, Messrs. Harrod and Grunsky.

Absent: General Davis, Messrs. Parsons and Barr, on duty on the Isthmus of Panama.

The minutes of the meeting of February 13 were read and approved.

The chairman presented the report of the auditor of the Commission for the month of January, 1905, as follows:

Dec. 31, 1904. Balance to credit of the appropriation in United States Treasury	\$8,580,068.27
To advances to A. S. Kenny, treasurer	140,000.00

Jan. 31, 1905. Balance to credit of the appropriation in United States Treasury	8,440,068.27
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Respecting the chief engineer's recommendations of February 1, 1905, relative to expense accounts, the chairman was directed to inform the disbursing officer on the Isthmus and the chief engineer that it is the sense of the Commission—

(a) That expenses incurred by any surveying or exploring parties operating at points other than those assigned as permanent stations, including subsistence, are to be borne by the Commission.

(b) That expenses incurred by agents of the Commission in securing labor are a proper charge against the canal construction fund.

(c) That the cost of transporting laborers to the Isthmus may be paid, but is to be considered an advance to the laborers, to be recovered by a suitable adjustment of their pay, unless otherwise provided by agreement. Approval of such transportation cost by the resident member of the Commission and by the chief engineer shall in all cases be requisite. It is to be understood in this connection, however, that no general authorization has been given to the chief engineer to negotiate for labor, but it should be understood that approval to enter upon negotiations should first be secured from the Commission; but that in cases offering special advantages, when laborers can be had from near-by sources, steps to secure the same may be taken upon

joint action of the chief engineer and the resident member of the Commission.

Mr. Grunsky, from the committee on sanitation, reported that the committee recommends the approval of the action of Governor Davis, as set forth in his communication of January 27, 1905, authorizing the charge of 75 cents (American currency) per day for patients admitted to Ancon Hospital by the "Comisión de Beneficencia."

On motion, the report was approved and adopted.

A communication from Brown & Co. was read, dated February 14, 1905, respecting contract recently awarded them for furnishing cypress cross-ties, to be delivered at Colon, whereupon Mr. Grunsky offered the following resolutions:

Whereas it is desirable to secure the immediate shipment of ties to the Isthmus, as offered by Messrs. Brown & Co., under date of February 14, 1905 (they now having a vessel under charter); and

Whereas 10,000 of the ties offered by them for immediate delivery do not fall into the classes recently contracted for, but are offered at a rate less than that of the said Brown & Co. (the lowest bidders) for an intermediate-size tie, this rate being determined by the contents of the ties in feet board measure: Therefore, be it

Resolved, That the purchase of an additional lot of 10,000 ties from said Brown & Co. be authorized, as follows:

Ties 7 inches by 9 inches by 8½ feet, at 77 cents each.

Ties 7 inches by 8 inches by 8½ feet, at 68 cents each.

It being understood that these ties must conform in other respects to the specifications of the ties to be furnished under contract by said Brown & Co.; and be it further

Resolved, That the acceptance of not to exceed 5,000 ties, faced top and bottom only, but otherwise in excess of the prescribed dimensions of 6 inches by 8 inches by 8 feet ties, and which would if squared at the sides conform to the specifications, is hereby authorized as a part of the delivery of the 50,000 ties of that size already contracted for.

The resolutions were adopted.

The chairman called attention to the matter of the establishment of a wireless-telegraph station upon the Isthmus and laid before the meeting correspondence relative thereto with Governor Davis, the Bureau of Equipment, Navy Department, the Secretary of the Navy, and the Secretary of War, and asked for an expression of opinion in regard to the same.

After discussion it was resolved that it was the sense of the Commission that the station should be placed where it may not interfere with future improvements, but that rather than cause delay the Commission, wishing to facilitate the erection of a wireless telegraph station, is willing to withdraw its objections to the site first selected and now desired by the Navy Department.

Mr. Harrod, to whom had been referred at a previous meeting the correspondence relative to the establishment of rest houses and food stations by the Salvation Army and the establishment of branches of the Young Men's Christian Association on the Isthmus of Panama, offered the following resolution:

Resolved, That the chief engineer be instructed to prepare plans and specifications for the erection of a rest house and food station for the use of the Salvation Army on such site in Cristobal as Governor Davis may indicate, and that the expenditure of \$2,500 is hereby authorized for the erection of said building and of \$750 for the purchase of standing furniture.

The use of said building shall be subject to such supervision and regulations as the governor of the Canal Zone may impose, and it must, at any time, be vacated upon his order.

The resolution was adopted.

The communication from the Secretary of War in regard to the establishment of branches of the Young Men's Christian Association on the Isthmus of Panama was then laid before the meeting, and it was the sense of the Commission that the chairman should obtain from the officers of the Commission on the Isthmus the necessary information as to proper location, character, and cost of buildings, and such other information as would enable the Commission to take proper action.

The meeting adjourned at 12.40 o'clock p. m., subject to the call of the chairman.

SEVENTY-EIGHTH MEETING.

EVENING STAR BUILDING,
Washington, D. C., February 17, 1905.

The Commission met at the call of the chairman at 3 o'clock p. m.

Present: Chairman Walker, Messrs. Harrod and Grunsky.

Absent: General Davis, Messrs. Parsons and Burr, on duty on the Isthmus of Panama.

The minutes of the meeting of February 14 were read and approved.

Mr. Grunsky presented the following resolution:

Resolved, That Deputy Auditor Robert R. West is hereby designated as the deputy auditor who is to act for and represent the auditor of the Isthmian Canal Commission on the Isthmus of Panama, and he is hereby authorized and empowered to perform and exercise the duties and powers of the office of the auditor of the Canal Zone.

The resolution was adopted.

The recommendation of Major Gallagher, purchasing and shipping agent, that assistant purchasing and shipping agents be appointed at New Orleans and San Francisco, at a salary of \$2,000 each, with a messenger each, at a salary of \$480 per annum, was then considered.

Major Harrod moved that agents be appointed at New Orleans and at San Francisco, at salaries of \$2,000 each per annum, to perform such duties as may be assigned to them from time to time in connection with Major Gallagher's office, and that each be allowed a clerk, at a salary of \$600 per annum.

The resolution was adopted; Commissioners Harrod and Grunsky having voted in the affirmative and Chairman Walker in the negative.

The following appointments made by the chairman since February 10, 1905, were approved, subject to civil-service regulations:

For service at Washington, D. C.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.
Dodge, Graham G	Stenographer.....	Feb. 11, 1905	Feb. 20, 1905	\$1,000 per year.
Jones, Wm. R	Messenger.....	.....do.....	Feb. 11, 1905	\$400 per year.

For service on the Isthmus of Panama.

ENGINEERING DEPARTMENT.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.
<i>Beam shovel men.</i>				
Clark, Wm. B.	Engineer	Feb. 14, 1905	Feb. 21, 1905	\$190 per calendar month and \$1 extra for each 1,000 cubic yards of excavated material loaded by shovel in his charge during 1 calendar month in excess of 25,000.
Garow, Wm.	do	Feb. 10, 1905	Feb. 18, 1905	Do.
Shannon, Wm. M.	do	do	do	Do.
Alexander, Chas. A.	Crane man	Feb. 13, 1905	Feb. 21, 1905	\$165 and extra as above.
Moss, William	Pitman	do	Feb. 22, 1905	\$75 per month.
Savage, R. J.	Fireman	Feb. 11, 1905	Feb. 21, 1905	Do.
<i>Clerks.</i>				
Chase, Carl F.	Stenographer	Feb. 15, 1905	Feb. 21, 1905	\$1,500 per year.
Huff, James B., Jr.	do	Feb. 11, 1905	Feb. 15, 1905	\$1,200 per year.
Meynes, Harry C.	do	Feb. 10, 1905	Feb. 21, 1905	\$125 per month.
Wakefield, Chas. E.	do	do	Feb. 22, 1905	Do.
Whelan, Jas. J.	do	Feb. 11, 1905	Feb. 28, 1905	Do.
Davison, Wm. H.	Resident engineer, Culobra.	Feb. 13, 1905	do	\$300 per month.
Watterson, F. B.	Transit man	Feb. 11, 1905	Feb. 22, 1905	\$150 per month.
Wickware, Jno. B.	Level man	do	Feb. 21, 1905	\$125 per month.
Allen, Fred E.	Rodman	Feb. 13, 1905	Feb. 28, 1905	\$83.33 per month.
Dorsett, K. C.	do	Feb. 11, 1905	Feb. 21, 1905	Do.
Muhs, C. C.	do	Feb. 15, 1905	do	Do.
Palmer, Geo. W. A.	Chainman	do	do	\$60 per month.
Stephenson, L. D.	Foreman pile-driving gang.	Feb. 11, 1905	Feb. 18, 1905	\$125 per month.
Tower, Martin	do	do	Feb. 22, 1905	Do.
Matlock, O. T.	Work-train conductor	Feb. 13, 1905	do	\$100 per month.
Smith, Jno. C.	do	Feb. 10, 1905	Feb. 21, 1905	Do.
Robertson, Wm. T.	Steam and air drill workman.	do	Feb. 22, 1905	\$83.33 per month.
Scott, Edward M.	do	do	Feb. 15, 1905	\$75 per month.
Olmstead, S. E.	Carpenter	Feb. 15, 1905	Feb. 22, 1905	Do.
Towne, Marcellus W.	do	Feb. 15, 1905	Feb. 28, 1905	\$100 per month.
Dickinson, W. E.	Blacksmith	Feb. 15, 1905	Feb. 22, 1905	45 cents per hour.
Fox, Wm.	do	do	Feb. 21, 1905	Do.
Wilson, Richard W.	Boiler maker	Feb. 10, 1905	Feb. 22, 1905	Do.
Kepperly, Wm.	Coppersmith	Feb. 13, 1905	do	Do.
Rumberger, Chas.	do	do	do	Do.
Dawley, Jno.	Machinist	Feb. 15, 1905	Feb. 28, 1905	Do.
Lue, Y. Geo. W.	Locomotive machinist	do	Feb. 21, 1905	Do.
Wester, F. B.	Machinist	do	Mar. 21, 1905	Do.
Cocoran, Wm. J.	Molder	Feb. 13, 1905	Feb. 21, 1905	Do.
Popodimis, Jno.	do	do	do	Do.
Eason, Jno. J.	Pattern maker	Feb. 14, 1905	do	Do.

MATERIAL AND SUPPLIES DEPARTMENT.

Cotter, J. N. a.	Assistant commissary	Feb. 13, 1905	Feb. 22, 1905	\$2,500 per year.
Eppelsheimer, I. P.	Requisition clerk	Feb. 10, 1905	Feb. 15, 1905	\$1,400 per year.
Helm, James P.	Lumber clerk	do	Feb. 22, 1905	\$1,000 per year.
Keyes, Glenn L.	Bookkeeper	do	Feb. 21, 1905	\$1,200 per year.
Readinger, M. G. b	Storekeeper	Feb. 11, 1905	Mar. 7, 1905	\$900 per year.

HEALTH DEPARTMENT.

Blake, Allen D.	Interne	Feb. 10, 1905	Feb. 21, 1905	\$50 per month.
Darling, Saml. T.	do	Feb. 13, 1905	do	Do.
Jaqua, James H.	Clerk	Feb. 10, 1905	do	\$1,200 per year.

DEPUTY AUDITOR'S OFFICE.

Strong, Conrad M.	Accountant	Feb. 15, 1905	Feb. 15, 1905	\$2,000 per year.
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a Vice C. H. McCall, resigned Feb. 11, 1905.

b Resigned.

The chief engineer's recommendation of February 1, 1905, for the appointment of William H. Davison as resident engineer at Culebra, at a salary of \$300 per month, was approved, subject to civil-service regulations, as were also the following promotions recommended by him.

Name.	Promotion.	Takes effect.
Allgood, E. P.	From foreman, \$100, to foreman, \$ 200	Jan. 1, 1905.
Banta, R. J.	From clerk, class 2, \$100, to general foreman, \$125	Do.
Gasparini, Chas.	From foreman, \$75, to general foreman, \$100	Do.
Lorents, Opton	From general foreman, \$125, to supervisor, \$150	Do.
Patterson, K. T.	From clerk, \$125, to chief clerk, \$150	Do.
Swell, O. D.	From foreman, \$100, to foreman, \$125	Do.

* Acting as master mechanic.

There being no further business, the meeting adjourned at 4 o'clock p. m., to the call of the chairman.

SEVENTY-NINTH MEETING.

EVENING STAR BUILDING,
Washington, D. C., February 20, 1905.

The Commission met at the call of the chairman at 3 o'clock p. m.

Present: Chairman Walker, Messrs. Harrod and Grunsky.

Absent: General Davis, Messrs. Parsons and Burr, on duty on the Isthmus of Panama.

The minutes of the meeting of February 17 were read and approved.

The chairman laid before the Commission a communication from President Amador, of the Republic of Panama, addressed to the Secretary of War, dated February 2, 1905, in relation to paving the streets of the city of Panama; communication from Santiago de la Guardia, minister of foreign affairs of the Republic of Panama, to Governor Davis, and Governor Davis's recommendations regarding the same subject to the Commission.

After discussion, Mr. Harrod offered the following resolution, which was unanimously adopted:

Resolved, That it is the sense of the Commission that such surface or paving as existed over the trenches opened in the streets of Panama be restored, unless, after conference between the authorities of Panama, the governor of the Canal Zone, and the chief engineer, it should appear that the Panama Government is willing to enter into a joint arrangement for the paving of the streets.

The chairman was instructed to communicate this resolution to the Secretary of War, and to inform him that in taking this position the Commission was fully aware of the advantages of doing the paving in connection with the laying of sewer and water pipes, but they considered that while paving undoubtedly contributed to sanitation, yet it served many other purposes—economic, police, commercial, and social. They therefore doubted the legality of paying for it exclusively from canal funds under the terms of the clauses in the treaty authorizing the expenditure of such for sanitary purposes in the cities of Panama and Colon.

If, however, the Secretary holds the opinion that the paving of the streets of Panama can, with propriety, be exclusively paid for as a

sanitary measure from the appropriation for building the canal between the two oceans, the Commission will immediately proceed with the work.

But it is submitted that the letters of the President and minister of state of Panama suggest a course of procedure by which an equitable adjustment of the burden of this work can be made between the United States and the Republic of Panama.

Article VII of the treaty provides for the building by the United States of waterworks and sewers in the city of Panama, and for a method of payment extending over a term of fifty years. Adopting the principle and phraseology of the treaty, the following agreement might be made to cover the case of paving:

All work of paving shall be made at the expense of the United States; and the Government of the United States, its agents, or nominees shall be authorized to impose and collect paving rates which shall be sufficient to provide for the payment of interest and the amortization of the principal of the cost and maintenance of said paving within a period of fifty years, and upon the expiration of said term of fifty years the system of paving shall revert to and become the property of the city of Panama.

Such agreement would require the authority of the Executives of both countries.

The chairman read the opinion of the general counsel on the appointment by Governor Davis of Mr. W. W. MacNeill, postmaster at Cristobal, to the office of mayor of the municipality of Cristobal, and called attention to the recommendation that the appointment be disapproved. The chairman was directed to send copy of the opinion to Governor Davis for his information and guidance.

The chair read, for the information of the Commission, the letter from Mr. J. Bruce Ismay, agent Pacific Steam Navigation Company, dated February 14, 1905, addressed to the Secretary of War, advising that the service of that company would be extended to the coffee ports north of the Isthmus as soon as the Panama Railroad Company will give through billing.

The communication from Governor Davis, dated Ancon, December 15, 1904, asking full instructions as to his authority in deporting undesirable persons from the Canal Zone, was then taken under consideration, and the following resolution, prepared by the general counsel, bearing on this subject, was presented:

Whereas the letter of instructions of the President, issued May 9, 1904, conferred upon the Isthmian Canal Commission authority, as follows:

"That the Commission shall have power to exclude from time to time from the Canal Zone and other places on the Isthmus over which the United States has jurisdiction, persons of the following classes who were not actually domiciled within the Zone on the 26th day of February, 1904, viz: Idiots, the insane, epileptics, paupers, criminals, professional beggars, persons afflicted with loathsome or dangerous contagious diseases; those who have been convicted of felony, anarchists; those whose purpose is to incite insurrection and others whose presence it is believed by the Commission would tend to create public disorder, endanger the public health, or in any manner impede the prosecution of the work of opening the canal; and may cause any and all such newly arrived persons or those alien to the Zone to be expelled and deported from the territory controlled by the United States, and the Commission may defray from the canal appropriation the cost of such deportation as necessary expenses of the sanitation, the police protection of the canal route, and the preservation of good order among the inhabitants."

Now, therefore, be it

Resolved by the Isthmian Canal Commission, That the governor of the Canal Zone, Isthmus of Panama, is hereby directed to enforce the requirements of the foregoing Executive order, and is hereby constituted the executive officer of the Isthmian Canal Commission for the purpose of carrying said order into effect, and hereby authorized to exercise for and on behalf of said Commission the authority conferred upon the Commission and properly to be exercised by it under that portion of the President's instructions hereinbefore set forth.

On motion of Mr. Harrod, the resolution was adopted.

The communication from Mr. E. S. Blackwell, manager of public accountants corporation, dated February 17, 1905, with preliminary report regarding the installation of a proper system of accounts for the Commission, was then considered, but action was withheld, pending the receipt of written detailed proposal from said company.

The chairman read for information letter of the chief engineer, dated February 9, 1905, transmitting copy of letter from Robert W. Hunt & Co., of Chicago, to the chief engineer, both respecting the shipment and inspection of the flat cars recently purchased from the Standard Steel Car Company, of Pittsburg, Pa., and asking for copy of contract with that company. It was directed that the desired copy of contract be furnished the chief engineer as early as possible.

The request of the chief engineer, dated February 9, 1905, that, in view of the rapid increase of routine work in his office, Capt. Edward L. King, general quartermaster, be authorized to sign vouchers for all sums of \$100 or less, was considered, but as such authorization seemed to involve a question of legality, the matter was ordered referred to the auditor for examination and report to the chairman.

There being no further business, the Commission adjourned to the call of the chairman at 3.55 o'clock p. m.

EIGHTIETH MEETING.

BOARD ROOM, PANAMA RAILROAD COMPANY,
New York, February 23, 1905.

The Commission met at 11.15 a. m. at the call of the chairman.

Present: Chairman Walker, Messrs. Harrod, Burr, Parsons, and Grunsky.

Absent: General Davis, on duty on the Isthmus of Panama.

Mr. Grunsky was appointed secretary pro tempore.

The reading of the minutes of the seventy-ninth meeting was dispensed with.

Mr. Burr, on behalf of the committee on engineering, submitted the following written reports, which were received:

ANCON, ISTHMIAN CANAL ZONE, *Executive Office, February 14, 1905.*

SIR: The committee on engineering of the Isthmian Canal Commission sailed from New York on January 17, 1905, and arrived at Colon on January 24. Under resolution of the Commission, Maj. Gen. Geo. W. Davis, governor, became a member of the committee during its stay on the Isthmus, and acted continuously in that capacity until its departure.

The committee began its duties immediately upon its arrival and held its sessions and conferences daily at the office of the governor, except when engaged in examinations of the actual or proposed work along the canal line.

The chief engineer of the Commission laid before the committee the entire data collected by the engineering field parties of his force and such maps, plans,

and other records as had been prepared in his office up to the departure of the committee. He was also in attendance at the meetings and conferences of the committee and on the field examinations, which included visits to all the parties on the entire line, as well as to all points of interest and importance in connection with the work.

The interior harbor at the Cristobal entrance to the canal and the adjoining works received early consideration from the committee because extensive harbor accommodations are urgently needed at once to serve ships there in discharging plant, materials, and supplies for the construction of the canal. These needs are already pressing, and they will rapidly increase and become far more pressing in the near future.

The committee examined in detail the site of this interior harbor, as well as the entire water front of Colon, on Friday, January 27, while a severe norther was blowing, and its members were thus fortunate in viewing conditions bearing most impressively on the design and construction of the necessary works at the Atlantic end of the canal.

The norther began glowing soon after noon on January 26, with such force that three steamships in the harbor of Colon at that time were compelled to seek safety by putting to sea and remaining away for three days. The U. S. S. *Dixie* was preparing to leave at about that time and was obliged to hasten her departure to escape the danger of the storm. Not a vessel of any description remained in the harbor except two schooners in the slips adjacent to the Panama Railroad station, which were tied by a number of cables at a sufficient distance from their piers to prevent damage from excessive pitching and rolling. They could not get away and were compelled to ride out the gale in grave danger to themselves and to the neighboring piers.

At the time of the committee's visit storm waves of great magnitude and force were rolling directly into the harbor, breaking over the entire water front of that part of Colon known as Aspinwall and blocking the marginal streets with deluges of water and great quantities of coral rock and other debris. The same effects were produced on Cristobal Point, seriously injuring a number of houses and rendering them uninhabitable, as well as putting out of use the marginal street. The magnitude and violence of the wave action along the entire water front of Colon not only drove to sea every vessel that could get away, but it also endangered the piers or wharves, some of which have been heretofore seriously damaged in similar storms. Further than this, great inconvenience and some loss were caused not only to the shipping interests affected but also to the canal work in interrupting the discharge of cargo urgently needed and in other ways injuring isthmiian transportation.

These storms occur on the average but once or twice a year, and during some years they do not occur at all. For probably not less than three hundred and sixty days in the year the harbor of Colon is free from any objection of this kind. If the construction of the canal were a purely commercial enterprise, the protection of an outer terminal harbor open to storms at rare intervals, as in this instance, would not be justified. This project, however, is a great public work by the United States Government, in which no feature contributing effectively to either safety or efficiency should be omitted.

It is, therefore, the unanimous and unqualified judgment of the committee that a harbor directly open to such heavy storm seas as to drive out shipping and endanger water-front structures, even if the storms occur on the average but once or twice a year, is clearly unsuitable even for the outer harbor at the entrance of the Panama Canal, where many ships must from time to time necessarily lie at anchor.

For these reasons the committee unanimously recommend that plans and specifications be at once prepared for a breakwater extending across the mouth of Limon Bay approximately on the line drawn from the light on Toro Point to the Colon light. This breakwater will probably be designed in two parts, each about 4,000 feet long, with an opening between them 700 to 800 feet wide for the entrance of ships.

It is the judgment of the committee that the construction of that portion of the breakwater nearest to Colon should be commenced at the earliest practicable date. This would insure a substantial measure of protection in the near future for the piers and wharves of the Colon water front, where ships may at all times transfer cargoes in safety. The remaining portion of the breakwater could then be constructed, if experience should show it to be necessary, or it can be omitted if there should prove to be sufficient harbor protection without it.

The rock required for the breakwater can be obtained of proper quality and

in any desired quantity from the deep portions of the summit cut of the canal between Obispo and Culebra, from the quarry at Bohio, and from Kenney's Bluff, on the west shore of the Bay of Limon. The hard rock of the summit cut is well adapted to the requirements of the superstructure. The cost of quarrying is not, therefore, an element of cost of the breakwater.

The interior harbor at the entrance of the canal immediately south of Cristobal Point, as proposed by the New Panama Canal Company, is urgently needed even at this time. Temporary timber pile wharves at Cristobal and adjacent to the entrance to the dry dock, half a mile farther south, have already been completed and used, but they are of small capacity, and there is insufficient depth of water in front of them. This harbor and the channel from the outer bay should be dredged at once and substantial timber quays or wharves should also be constructed immediately.

At its meeting on February 1 this committee unanimously passed the following resolution, as shown by the minutes of its meetings accompanying this report:

Resolved, That the committee approve and recommend to the Commission 30 feet as an immediate depth for the inner harbor at Cristobal and approach thereto, beginning at the 30-foot contour in the outer harbor and extending thence to station 51, where it appears that indurated clay will be met at that depth. The width of approach channel should be about 500 feet, and that of the inner harbor about 1,000 feet, except as narrowed at the north end of Mangrove Beach Island, to reduce coral rock excavation, and widened at turn to make a basin.

This harbor, so constructed as to bring conveniently along its quays the tracks of the Panama Railroad, will be of the greatest value during the entire progress of the canal work.

In order to cover all possible contract work which it may be desirable to undertake along the approach channel and interior harbor heretofore contemplated as parts of a finished canal and entrance harbor, this committee, at the same meeting of February 1, unanimously passed the following resolutions as expressing further recommendations to the Commission:

Resolved, That bids be invited for dredging from the outer harbor to station 51 on the widths as in the preceding resolution, and from station 51 to station 100 for a width of about 1,000 feet, all at depths of 30, 35, and 40 feet.

Resolved, That the material be classified as—

1. Coral and other rock;
2. Indurated clay;
3. Sand and mud;

and that bids be asked for delivering material excavated by pumping at any point within 2,000 feet, as selected by the engineer, and with extra prices for each 1,000 feet in addition. Hard material shall be carried to and dumped at sea within a maximum distance of 3 miles from Cristobal Point, as directed by the engineer.

Resolved, That the chief engineer be directed to prepare the plans and specifications for the work, as indicated by the above resolutions.

Although the interior harbor and approach channel as planned and recommended should be built immediately, it is the unanimous judgment of this committee that, with the construction of the breakwater, a direct entrance to the canal at or near Boca Mindi, with a straight approach channel from the outer harbor, has such substantial advantages that it should be adopted independently of and in addition to the canal connecting with the inner harbor as heretofore planned. Ships may then proceed directly through the outer harbor into the canal, or into the inner harbor for coal or other purposes, and thence into the canal. The proposed direct entrance and approach channel are shown on the plans submitted herewith by the chief engineer.

The estimated quantities of material required to be excavated, or to be used for the construction of the breakwater, are as follows:

Common rock fill, 3,000,000 cubic yards.

Hard rock, 400,000 cubic yards.

At the present time the waters of the Gatunillo River flow through a diversion channel south of Gatun into the Chagres River at that point. The combined flow of the Chagres and Gatunillo is taken almost entirely into the channel of the former to the point where it cuts the canal excavation, a short distance north of Gatun, where the joint discharge divides, the larger part following the Chagres to the sea, and the remainder flowing through the canal excavation to Boca Mindi, where it escapes through the enlarged mouth of the Mindi River into Limon Bay. The natural result has been the formation of a large

bar, filling almost the entire canal channel immediately north of Boca Mindi. This action has been intensified when floods have filled the Gatuncillo and Chagres rivers.

The old Panama Canal Company nearly completed what is known as the Gatuncillo diversion channel, located east of and mainly near to the canal line from the Gatuncillo River or Puerto Escondido in Manzanillo Bay. The continuation of this diversion southerly was partially excavated at numerous points from Gatun to Gamboa, easterly of the canal line, and it will probably have to be completed throughout that entire distance. Immediate attention, however, is directed to that portion already described and called the Gatuncillo diversion, which receives the waters of not only the Gatuncillo River but also of the Mindi and other smaller streams flowing down from the high ground in that vicinity and thus prevents them from entering the canal.

Whatever may be the final plans of the canal, or of its subsidiary work, this diversion must be completed and employed to discharge the waters it receives into Manzanillo Bay. The bottom width of the present excavation is about 115 feet, and it originally had a depth of water of about 15 feet. Silt and mud have now settled in it to a depth of 1 to 3 or 4 feet, leaving from 10 to 13 or 14 feet of water. Two short stretches still remain to be excavated, one back of Monkey Hill, about 1,600 feet in length, of hard indurated clay, and the other about 2,000 feet in length, mostly of mud, silt, and sand, near the Mindi River, where the railroad crosses its line; besides any enlargement of section that may be necessary.

Two small dams must also be constructed about 2,500 feet apart across the Chagres River, near Mindi, to retain within the diversion channel the waters which must not enter the canal. A diversion of the Chagres on the westerly side of the canal, in the same vicinity, must be retained to take the flow of the Chagres directly to the ocean. Another dam must be built across the Boca Mindi, on the line of railroad, to prevent the discharge of the Gatuncillo diversion through that opening which its waters now follow. These three dams and the Chagres diversion are necessary to complete the separation of the waters intended to flow through the Gatuncillo diversion and the Chagres River.

All the works thus far discussed are quite independent of the type or dimensions of the canal south of Gatun, and their construction is imperative; therefore this Committee unanimously recommends their immediate completion.

Before other subsidiary questions can be decided or even considered a determination must be reached as to the elevation of the summit level. The plan of the French company, under which they were working, placed this level at 97.5 feet above mean tide, to be supplied with water from a storage lake at Alhajuela, which was also to regulate the Chagres. The former Isthmian Canal Commission considered a summit level at 85 feet, to be maintained by a large dam at Bohio, making a lake with an area of 38.5 square miles, and thus regulating Chagres floods.

When the present Commission was created it was realized that before a final determination could be made with propriety, additional data should be obtained other than that possessed by the French company or secured by the former Commission, and especially that positive information should be had as to the probable cost of excavation, for on such cost, both as to time and money will the type of the canal in large part depend.

Survey parties were at once established and contracts let for the installation at Culebra of a modern excavating plant.

The work of excavation in the summit, or Culebra, cut has been actively prosecuted under the direction of the chief engineer, so that the total quantity excavated during the month of January of the current year was about 71,000 cubic yards. The first three steam shovels of the 17 recently contracted for in the United States are now set up and at work, although the third one had not made a beginning of its work on the 1st of February. A shovel has exceeded a daily output of rock excavation of 1,000 cubic yards. The operations of the shovels have been entirely satisfactory, and they have already proved themselves to be machines of high efficiency. Indeed, the results so far attained indicate that there is no other type of machine better adapted to the class of work to be done in the summit cut or which can reach a greater efficiency. The French excavators have also been put in a much more efficient condition, so that in clay excavation a single machine has also reached a daily output of nearly 1,400 cubic yards, but they are not well adapted to rock.

As a result of the experience thus far gained in the actual rock and clay excavation at Culebra, the average monthly cost per cubic yard has fallen below 50 cents. The chief engineer, therefore, is confident that the average

cost of all the excavation in the summit cut will not exceed 50 cents per cubic yard, and this committee concurs in that opinion. The former Isthmian Canal Commission assumed in its estimates that the average cost of excavation in the great summit cut would be 80 cents per cubic yard. The demonstrated cost of this Commission's actual work at Culebra, if applied to the quantities employed by the former Commission, would reduce the total estimated cost of the canal about \$15,000,000. This large saving in cost makes a fundamental reconsideration of canal plans by this Commission essential. It is obvious that this actual reduced cost of excavation justifies a reduction in the elevation of the summit level of the canal by a correspondingly greater volume of excavation. After a careful consideration of all the elements of this portion of the canal problem this committee, as an expression of its judgment, passed unanimously the following resolution at its meeting on February 1:

Resolved, That the elevation of the summit level of the canal should not exceed 60 feet."

As will be seen by the accompanying report of the chief engineer, he has prepared full statements of estimated costs of construction of the canal for three different summit elevations:

1. With summit elevation at 60 feet above mean tide.
2. With summit elevation at 30 feet above mean tide.
3. A sea-level canal.

The total estimated costs of these three types of canal, including the break-water, direct-approach channel, and interior harbor at Colon, will be:

Summit level at 60 feet elevation, \$178,013,406.

Summit level at 30 feet elevation, \$104,213,406.

Sea level, \$230,475,725.

These totals include a margin of 20 per cent for contingencies, administration, sanitation, and engineering.

The effective control of the Chagres River, especially during its floods, which are frequently sudden and of great volume, has also been considered in all its relations to the plans of the canal which may ultimately be adopted. Inasmuch as the elevation of the water in the Chagres River at Gamboa is about 55 feet above mean tide, or but 5 feet below a summit level placed at 60 feet above mean tide, it is the judgment of this committee that the control of the Chagres River, with a summit level at an elevation of 60 feet or less, should be effected at or in the immediate vicinity of Gamboa, which the examinations made by the field party operating at that location and in the valley of the Chagres above Gamboa show to be entirely feasible.

For these reasons, the committee unanimously passed the following resolution, expressing its recommendation to the Commission at the meeting of February 1:

Resolved, That in the event of the Commission approving the foregoing resolution, that the Chagres River be retained by a dam located at Gamboa and built to a crest height of about 200 feet."

The complete data secured by the surveys and examinations of that field party are given in the accompanying report of the chief engineer. They show that the high hills on both sides of the river at Gamboa, in connection with the maximum depth of bed rock in the river, about 56 feet below low water, render the construction of the dam across the Chagres at this location, with the attendant works of pipes and gates and waste weir, reasonably free from serious difficulties and bring construction within reasonable cost. Surveys show that the area inclosed within the flow line of the lake formed by this dam for the elevation of water surface at 200 feet above mean tide would be 43.3 square miles; at the elevation of 170 feet, 30.8 square miles; and at the elevation of 132 feet, 14.9 square miles.

Accurate flood records for the Chagres River have been kept during the past thirteen or fourteen years only. The greatest flood which has occurred since the beginning of the construction of the Panama Railroad in 1851 was that of 1879. No authoritative record of the highest water, either at Bohio or Gamboa, or at any other point, nor of the maximum discharge of that storm, exists. The storm which caused this flood lasted about six days and approximate evidence of its highest stage at Bohio is preserved in the memories of some persons now living. All the reliable information that can be ascertained has been used to determine approximately the greatest rate of discharge of the Chagres at Bohio, which is supposed to have been about 136,000 cubic feet per second. It has further been concluded that the average discharge for 48 hours was about 112,000 cubic feet per second. While these results are approximate only, it appears that they may be safely employed for the determination of some gen-

eral features of control. The results for Gamboa are somewhat less, both in rate and in total volume than at Bohio.

If an average discharge of 100,000 cubic feet per second for 72 hours be assumed at Gamboa, the resulting computations will certainly lead to safe conclusions regarding the capacity for control of the proposed Gamboa Lake. If that amount of water flowed into the lake formed by the proposed Gamboa dam, with an initial water surface of the lake at an elevation of 180 feet, such a three days' inflow with no outflow would raise that surface not more than 30 feet, or to the elevation of about 190 feet. If, on the other hand, a uniform outflow of 20,000 cubic feet per second were maintained during the same length of time, the resulting rise of lake surface would be but a little over 20 feet, thus raising the elevation of that surface to slightly above 180 feet. The Gamboa Lake, therefore, may be used in this manner as an effective control of the Chagres River, even during the highest flood which there is any reason to anticipate.

The greatest volume of continuous inflow into the lake which could take place under the authentic records of the past 14 years is about 305,000 acre-feet per month for six consecutive months in 1892, and of 700,000 acre-feet for one month in 1894. A continuous outflow of not more than 10,000 cubic feet per second during these two periods of inflow would enable the lake to take care of both these periods of great discharge without raising the surface of water more than a few feet and for a short period only.

While further detailed studies beyond those which were available to the committee on the Isthmus are required to determine the exact elements of this problem of the control of the Chagres during varying periods of high rates of inflow, the examination made by this committee shows conclusively that the lake proposed has sufficient capacity to afford abundant regulation of the Chagres floods.

The necessary rates of the outflow from the lake during flood periods may be obtained by means of large pipes and gates built into the dam itself, together with a waste weir at the same point, or by means of a tunnel about 3.4 miles long through the dividing ridge between the Chagres and Gatuncillo watersheds, or by both. The elevation of the invert of this tunnel at the Chagres end may be placed at 132 feet above mean tide. If such a tunnel were built at the elevation named, with a diameter of 30 feet, it could be depended upon to discharge 15,000 cubic feet per second, with the elevation of water surface between 180 and 185 feet, the mean velocity of water through the tunnel being about 20 feet per second. At least the same rate of discharge, and a greater one if required, may be obtained through properly controlled pipes at the dam discharging either into the canal or into a diversion channel on the easterly side of the Chagres River, constructed the entire distance to the Gatuncillo diversion, or into both.

Surveys for the location and estimate of cost of the tunnel for discharging into the upper waters of the Gatuncillo have already been completed, as well as for a similar tunnel to discharge into the Pacific. Complete surveys are about to be undertaken to ascertain the exact amount of work which has been done on the Chagres diversions between Gamboa and Gatun, so as to make an accurate estimate of the cost of their completion. As soon as these latter surveys are completed, the exact estimates of cost, both for the tunnel and for the diversion discharge, can be made, and all the details of these features of the regulation works can be determined.

Work on the foundation for the dam at Gamboa can be begun at once. This portion of the construction of the dam will probably require from a year to a year and a half of time, and it is the unanimous judgment of the committee that it should be undertaken immediately, and that the construction of the entire dam should be completed as soon as practicable.

The building of the dam at Gamboa will not only furnish complete and effective means of control for the Chagres floods, but it has the further advantage of being entirely accessible by the Panama Railroad for the transportation of men and materials. The plan of the dam will probably require a masonry core, with a great mass of earth and rock fill on either side of it, from the waste excavation of the summit cut. The plan, therefore, has marked merits of both efficiency of control and economy of construction.

The conditions attending the construction of this dam are in no way unprecedented. The depth of bed rock below water surface is only about one-third that at Bohio and no greater than has already been reached by the use of heavy timber sheet piling for founding masonry structures in the United States.

The proposed height of this dam from its foundation to its top is far less

than found in a number of masonry dams already built, and the making of the earth embankments on the two sides of the masonry core is simply wasting the material from the summit cut. The construction of the Gamboa dam, therefore, involves no formidable obstacles not heretofore successfully encountered in engineering practice.

The practicability of certainly and satisfactorily controlling the floods of the Chagres by so simple and economical a method as the Gamboa Lake and its outflow channels, and the reduced cost of excavation as actually demonstrated by the work of the Commission in the Culebra cut, makes the construction of a sea-level canal at a reasonable cost far more available than has heretofore appeared possible. These recent developments in the conditions attending the construction of the canal are so important as to be almost controlling in character. The remaining element is that of the time required to make the great summit excavation. It is to be carefully observed that the results thus far obtained in the Culebra cut have been reached under disadvantageous conditions of both organization of plant and force.

The railroad tracks serving the excavators are yet fragmentary and tentatively placed to serve the purposes of investigation. In both respects the disposition of plant is far more unfavorable, both to economy and celerity of operations, than will be the case when a complete track system has been arranged and laid down to serve a large number of steam shovels operated by an experienced force. In the face of these disadvantageous conditions, the cost of excavation has been reduced far lower than was anticipated, and it has been demonstrated that each steam shovel may be counted upon to yield an average record of at least 1,000 cubic yards per working day. The chief engineer estimates that with 100 steam shovels installed, with a complete system of tracks serving them, a yearly record of 30,000,000 cubic yards of excavation may be reached without requiring a greater output per shovel or greater speed in working than has already been attained. This rate of working could probably be reached within two years from the present time.

With the rate of progress which now appears reasonable to anticipate, this committee believes that a sea-level canal, with a tidal lock 1,000 feet long and 100 feet usable width, at Miraflores, can be completed within ten to twelve years from this time, the bottom width of the canal being 150 feet and the minimum depth of water 35 feet.

These considerations have induced this committee to express to the Commission its unanimous judgment that with the contemplated system of working and with the rate of development which appears to be justified by the work now being performed at Culebra, a sea-level canal, free from the restriction of locks, should be adopted. This committee believes that such a canal, with terminal harbors, can be constructed for a sum not exceeding \$230,500,000.

The advantages of a sea-level canal across the Isthmus are most obvious. It would be a waterway with no restriction to navigation, and which could easily be enlarged by widening or deepening at any time in the future to accommodate an increased traffic, without any inconvenience to the shipping using it, whereas a lock canal is in reality a permanent restriction to the volume of traffic and size of ships that use it. Although it is possible to design and construct locks adapted to the future transformation to a sea-level canal, that transformation can not be made without serious inconvenience to navigation and at a cost so great as to be excessive. The additional cost of a sea-level canal over that of a canal with locks, with a summit level of 60 feet above mean tide, is \$52,462,000, or \$79,742,000 more than the estimated cost of the lock canal with a summit level 85 feet above mean tide, proposed by the former Isthmian Canal Commission, after allowing \$6,500,000 for the Colon breakwater and direct entrance not previously estimated. This committee considers this additional expenditure fully justified by the advantages secured.

This committee has considered most carefully suitable dimensions for the cross sections of the canal to be built. It has had in view the dimensions of the ship canals now built and in use, such as the Suez, the Manchester, the North Sea, and other similar waterways. The fact has also been carefully borne in mind that the city of New York is deepening its entrance channel to 40 feet. On the other hand, it is recognized that the depth of the Suez Canal is less than 30 feet, that the depth of the Manchester Canal is 26 feet, the North Sea Canal 32.8 feet, and the Kiel Canal 29.5 feet. It is also recognized that at the present time no loaded ship either enters or leaves the harbor of New York drawing more than about 33 feet. It is believed, therefore, that for many years the commerce seeking the Panama Canal will be amply accommodated by a depth of water not exceeding 35 feet.

In view of these considerations, this committee expresses its recommendation to the Commission by the following two resolutions, unanimously passed in its meeting of February 3:

"Resolved, That 150 feet be recommended as the minimum bottom width.

"Resolved, That 35 feet be recommended as a minimum depth, but that estimates be prepared for a depth of 40 feet as well."

If a canal with locks should ultimately be determined upon, this committee is of the opinion, in view of the restrictions which such structures impress upon a growing commerce, and in view also of the difficult and costly process of transformation to a sea-level canal under any practicable conditions, that the locks should be made of 1,000 feet usable length and 100 feet usable width, but fitted with intermediate gates, so as to accommodate small ships with less consumption of water and less time required to pass the locks.

The borings along the sites proposed for the dam across the Chagres near Bohio have shown that bed rock is deeper than has been supposed at all the sites contemplated. The greatest depth to rock, both at the French site and on that tentatively proposed by the former Isthmian Canal Commission, is about 158 feet below sea level, and but little less at a third site a short distance upstream from the former, as shown by the borings thus far made. These results indicate greatly increased difficulties in the construction of any dam in the vicinity of Bohio. Further borings are now being made at a site near Buenavista, little more than half a mile above the French site, where the depth of bed rock seems to be at sensibly less depth. The investigations now in progress will soon be completed. Their completion is necessary to determine the most advantageous dam site in the vicinity of Bohio or Buenavista, if such a dam should be required. These borings, like others previously made in this location, have disclosed coarse, gravelly material freely water bearing down to bed rock at many points, as well as occasional fragments of timber. This clearly indicates the necessity of cutting off subsurface flow along the deepest bed rock in case a dam should be built at this location. These conditions are formidable because they are found at such great depths.

The surveys and examinations which have been made in regard to a possible dam site across the Chagres River at Gatun show that such a structure is not feasible. The width of the floor of the valley at that point is about 5,000 feet, and two borings made at what appears to be the most favorable section penetrated to a depth of 172.7 feet and 139.2 feet below sea level, respectively, without finding bed rock. Other examinations and borings have also been made at other sections of the Chagres Valley where a dam site seemed possible, between Gatun and Bohio, but with equally unfavorable results. It is clear, therefore, that it is not feasible to construct a dam across the Chagres River at any point lower down in its course than at Bohio.

As will be seen by the report of the chief engineer the examinations made along the alternative line between Bohio and Gatun, known as the Tiger Hill cut-off, show that it will be costly to construct, and that for a considerable distance between Tiger Hill and Bohio it would be necessary to retain the water in the canal by embankments not less than 20 feet high, in some cases on soft ground. This committee is, therefore, unanimously of the opinion that it is advisable, both on the score of economy and of safety of construction, to retain the present canal line between Gatun and Bohio.

At the meeting of this committee, held on February 14, the following resolution was unanimously adopted:

"Resolved, That this committee approve and recommend for adoption by the Commission a plan for a sea-level canal, with a bottom width of 150 feet, and a minimum depth of water of 35 feet, and with twin tidal locks at Miraflores, whose usable dimensions shall be 1,000 feet long and 100 feet wide, at a total estimated cost of \$230,500,000. Such estimate includes an allowance for administration, engineering, sanitation, and contingencies, amounting to \$38,450,000, but without allowance for interest during construction, expense of Zone government and collateral costs, and water supply, sewers, or paving of Panama or Colon, which last items are to be repaid by the inhabitants of those cities."

Respectfully,

WM. H. BURN,
WM. BARCLAY PARSONS,
GEO. W. DAVIS.

Rear-Admiral JOHN G. WALKER, U. S. N.,
Chairman Isthmian Canal Commission,
Washington, D. C.

ANCON, ISTHMIAN CANAL ZONE, February 14, 1908.

Sir: Besides the engineering questions, which have been treated in another report, all branches of the Commission's administrative work on the Isthmus received full consideration by the committee on engineering while there.

The construction of the waterworks and sewer system of Panama is in a forward state of progress, but seriously delayed at the present time by failure to receive promptly the pipe and other material required for both classes of work. Immediate shipment of all the remaining material should be pressed by every legitimate means within the power of the Commission, including the enforcement of penalty clauses in the contracts.

An excellent source of water supply for the city of Colon has been found on Brazos Brook, about 4 miles from the city. A standpipe and small pumping plant will be required. The construction of this work should proceed at once. The design of the sewer system of the city of Colon depends largely upon the amount of filling to be done from the adjacent canal excavation soon to be undertaken. Plans and specifications for both of these public works for the city of Colon will be completed at the earliest practicable date, so that no time may be lost in the ultimate completion of the work contemplated.

The administration of the department of material and supplies is in a satisfactory condition. It has taken over the commissary department of the Panama Railroad Company and made preparation to adapt it in every way to the requirements of the Commission. The ice plant at Colon still remains with the railroad company, but it should be made a part of the commissary plant and be operated by the department of material and supplies. A cold storage plant is most urgently needed for the reasonable comfort and well-being of the American employees of the Commission on the Isthmus, and this committee strongly recommends the earliest possible installation of such a plant in the department of material and supplies.

The entire work of the department of sanitation has been prosecuted in an efficient manner and with gratifying results. The present state of Ancon and other completed and organized hospitals is satisfactory. The repair work on the Colon Hospital is fully two-thirds completed and is being pushed as rapidly as possible. This will afford a capacity of about 100 beds. When the nurses' quarters are completed and suitable accommodations provided for the members of the sanitary staff and the engineer force now quartered there, the capacity of Ancon Hospital will reach 500 beds. The nurses' quarters should therefore be completed immediately and accommodations afforded elsewhere for the members of the sanitary staff and engineer force with equal promptness.

Arrangements have been made by which weekly and monthly reports of the hospital service will be regularly forwarded to the Washington office hereafter.

The work of exterminating the mosquitoes throughout the entire Zone is still being vigorously prosecuted in Panama and Colon and along the canal line. Improvements in this direction, indicated by greatly decreased numbers of mosquitoes, is marked and gratifying. Much remains to be done in screening water containers, especially in Panama and Colon, and in the drainage of wet or marshy ground, or by other means, but the sanitary force is making excellent progress along these lines, and there is every reason to believe that satisfactory and permanent results will be reached and maintained.

During the past six weeks the number of yellow-fever cases has increased, although the number of new cases seems now to be decreasing. This increase culminated in the seven cases, with two deaths, on the U. S. S. *Boston*, lying at anchor in the Bay of Panama. None of these cases, except those on the *Boston*, had any connection with any other case. They were sporadic, and due to infected mosquitoes remaining in a few houses or hotels. The resulting conditions have received prompt and effective treatment in every instance. Every building in the city either has been or is to be fumigated to kill all mosquitoes in them. Some foci of infection have been fumigated more than once. There is no reason to doubt that the sanitary forces of the Commission have control of the situation and that yellow fever will be stamped out in the near future, although more or less sporadic cases must be expected until that condition is attained.

The streets of Panama are paved with cobblestones and are in a very unsatisfactory condition. A few weeks ago, while the cleaning was done by the municipality, the sanitary condition of these streets was very bad. On the 1st of February the sanitary department of the Canal Zone assumed entire charge of street cleaning, and the condition of the streets to-day is as satisfactory as is possible with a pavement such as exists.

The Government of the Republic has asked the Government of the United States to resurface these streets under the same conditions as to repayment that are fixed in the canal treaty respecting waterworks and sewers.

The Commission having established a purchasing department in the Washington office, it will be possible to fill requisitions for engineering materials and medical supplies expeditiously. The heads of departments on the Isthmus should receive information as to the receipt or disposition of requisitions and of the conditions of shipment of material and copies of contracts as promptly as possible. Advertisements for purchases required by requisitions should be prepared and printed in the shortest possible time, and awards should be made promptly. It is particularly urgent that means be taken by the purchasing department to insure the promptest possible shipment of all classes of materials in such a manner and in such order as will enable their reception and disposition on the Isthmus to be made in proper order and expeditiously.

It is of the utmost importance that arrangements be made for immediate and large additions to the labor forces here. The work has advanced to such an extent that it will be difficult to meet with sufficient promptness the demands of its future development. During the month of January about 1,000 men were absorbed in the labor forces with the utmost ease and without meeting nearly the full requirements of the work. Indeed, it is probable that with the promptest and most efficient treatment of the matter, it will be difficult during the next year to bring into the Zone as large a plant and as many laborers as can be advantageously used or employed. This subject urgently needs the immediate attention of the Commission.

The clerical force in the executive office at Panama and the engineering forces also need material additions. At the present time it is found impossible to keep up the work, even with much night service. This is a condition which should be immediately remedied by a sufficient addition to the forces to enable their work to be completed with reasonable effort each day.

Another subject of at least equal urgency is that of suitable accommodations for the American employees of the Commission. New buildings, pleasantly located and suitably planned, are most pressingly required. It is in the highest degree desirable, if not necessary, to provide such accommodations outside of the city of Panama. For these reasons, which will be amplified by the oral statements of the members of the committee, the accompanying resolutions were passed unanimously at the meeting of the committee held in the governor's office on February 13.

Respectfully,

WM. H. BURR,
WM. BARCLAY PARSONS,
GEO. W. DAVIS.

Rear-Admiral JOHN G. WALKER, U. S. N.,
Chairman Isthmus Canal Commission, Washington, D. C.

The resolutions referred to, accompanying the foregoing committee report, are as follows:

Resolved, That the chief engineer be authorized to erect suitable quarters for married men with families and single men of various grades of employment in such places and of such construction as may be approved by the governor on the recommendation of the chief engineer. Such quarters under this resolution to be limited to accommodations of 50 families, 100 single men of grade of engineer or clerks, 200 men of grade of mechanics, and 3,000 laborers, and temporary quarters, with commissary, for laborers on arrival. The chief engineer shall report to the Commission from time to time what action has been taken under this authorization. This resolution shall be sufficient authority for the chief engineer until revoked or altered by the Commission.

Resolved, That the chief engineer be directed to examine the canal administration buildings at Taboga with a view of establishing therein quarters for employees and their families, with a regular transportation source between Taboga and Panama, to such an extent as will not interfere with a reasonable use of the buildings by the sanitary department, and to report to the Commission.

Resolved, That, in the opinion of the committee, Ancon Hill and the adjacent territory afford the best site for erecting permanent quarters of the Commission, Zone officers, and certain classes of employees, together with offices and hos-

pitals, and, further, that this committee recommend to the Commission the early employment of a landscape architect to visit the Isthmus, to report to the governor, and to confer with the chief engineer, and to devise a plan for most advantageously developing the land."

At 2 o'clock p. m. the Commission adjourned to the call of the chairman.

EIGHTY-FIRST MEETING.

EVENING STAR BUILDING,
Washington, D. C., February 28, 1905.

The Commission met at the call of the chairman at 10.30 a. m.

Present: Chairman Walker, Messrs. Parsons, Burr, Harrod, and Grunsky.

Absent: General Davis, on duty on the Isthmus of Panama.

The minutes of the meetings of February 20 and February 23 were read and approved.

The chairman read a cablegram from the chief engineer recommending the immediate discharge of Tie Inspector Schriever, and stating that full particulars would be sent by mail.

Mr. Burr moved that Mr. Schriever be relieved from duty as lumber inspector and discharged from the service of the Commission as soon as a suitable substitute can be found.

The motion was adopted.

The chairman read a communication from Edmund L. Baylies, counsel for the Central and South American Telegraph Company, respecting the matter of cable communication between the United States and Panama, and offering a reduction to 25 cents per word on cable messages, conditioned upon certain concessions to that company in the way of offices in the Commission's buildings at Panama and Colon and the free use of a wire between Panama and Colon, the arrangement to last for a period of two years and to continue until canceled upon four months' written notice. This communication bore the indorsement of Colonel Edwards, Chief of the Insular Bureau, asking for consideration and report by direction of the Secretary of War, and stating that the proposal was the result of a conference between the Secretary of War and the representatives of the Central and South American Telegraph Company.

After discussion it was the sense of the meeting that the telegraph company be allowed to connect with the Commission's wire at Panama; that the Commission will receive messages at Colon without charge to them if that company will bear the expense of delivery and establish a messenger service.

The chairman presented a communication from Major Gallagher, U. S. Army, purchasing and shipping agent, relative to the present arrangements for inspecting machinery, material, and supplies purchased by the Commission, calling attention to the fact that verbal authority seems to have been given by the chief engineer for the employment of Robert W. Hunt & Co.'s bureau of inspection, Chicago, Ill., and that Messrs. Hildreth & Co. seem also to have been authorized to do part of the work of inspecting. The purchasing and shipping agent recommended that he be given control of all arrangements for inspection, with a view to establishing a regular system of

inspection through proper agreements with reliable inspection bureaus, testing laboratories, and individual inspectors whenever the same may be necessary. The purchasing agent's letter was accompanied by copies of letters from the chief engineer to the secretary and from the chief engineer to Mr. Robert W. Hunt, of Chicago.

After discussion it was the sense of the Commission that all instructions should pass through the purchasing and shipping agent in order to establish regularity of procedure.

The Commission took a recess at 1 o'clock p. m.

The Commission reassembled at 3.20 o'clock p. m.

Consideration was given the recommendation of the chief engineer of February 8, 1905, that the present order for steam shovels be increased by addition of six steam shovels of type "A" and six steam shovels of type "B," deliveries to be made at the rate of two shovels per month between July and December, inclusive, of the present year.

Commissioner Harrod moved that the purchase of 12 steam shovels, 6 of the 70-ton type and 6 of the 95-ton type, be authorized, bids to be invited by advertisement, deliveries to be made at the earliest practicable date, and proposals to carry with them an option permitting the ordering of 12 additional steam shovels, 6 of each type, if ordered within six months from the date of signing the contract.

The resolution was unanimously adopted.

Regarding the request of Governor Davis, dated January 17, 1905, for instructions in the matter of issuing orders for steamship tickets at reduced rates for employees who have been discharged or have resigned, Mr. Grunsky offered the following:

Resolved, That the employees of the Isthmian Canal Commission and of the Canal Zone government shall be granted for themselves and members of their families such reduced rates of transportation as are available to the Isthmian Canal Commission, from the Isthmus of Panama to ports of the United States, in cases of resignation or discharge—

1. When an employee has rendered satisfactory service on the Isthmus for six months or more.
2. When an employee has been in the service on the Isthmus for at least one year.
3. When ill health is the cause of resignation. (Doctor's certificate required.)

Resolved, That employees shall be given free transportation from the Isthmus to either New York or New Orleans (or San Francisco if the employee came from the Pacific coast for service with the Commission), and their families shall be entitled to reduced rates of transportation to United States ports—

1. When resigning after at least two years' satisfactory service on the Isthmus.
2. When physical or mental disability due to injury sustained or to ill health contracted in the service of the Isthmian Canal Commission or of the Canal Zone government is the cause of the resignation or dismissal.
3. Upon termination of the work for which the services of an employee were secured, or upon dismissal necessary because of a reduction of the force of employees.
4. In special cases heretofore or that may be hereafter authorized.

The resolution was adopted.

The chairman called attention to the fact that act No. 22, entitled "An act to amend act No. 7 of the Isthmian Canal Commission, entitled 'An act to provide for the organization of municipal governments in the Canal Zone, Isthmus of Panama,'" was enacted January 31, 1905, when but three members of the Commission were present and suggested the propriety of reenacting it. The act was read, and, on the motion of Commissioner Harrod, reenacted. Those voting aye having been: The chairman, Messrs. Parsons, Burr, Harrod, and

Grunsky; nays, none. The chairman thereupon declared it carried and the act enacted as an act of the Canal Zone.

The chairman called attention to the communication of Governor Davis, dated January 26, 1905, asking for approval of his action in increasing temporarily the salary of Mr. Herman A. Gudger, deputy collector of revenue, to \$1,500 (United States currency) per annum, and the chairman also recommended that the salary of Tom M. Cook, collector of revenue, Canal Zone, be increased from \$2,500 to \$3,600 per annum.

On motion the proposed increases of salary were approved.

The chairman then read draft of an act prepared by the general counsel, entitled:

"An act to amend sections 30, 32, and 35 of act No. 8, Laws of the Canal Zone, Isthmus of Panama, entitled 'An act to provide for the organization of the executive branch of the government of the Canal Zone, Isthmus of Panama.'"

Mr. Burr moved the adoption of the act as read.

A vote was taken on the motion and the following voted aye: The chairman, Mr. Parsons, Mr. Burr, Mr. Harrod, and Mr. Grunsky; nay, none.

All the members present having voted in favor of the motion, the chairman declared it carried and the act enacted as a law of the Canal Zone and directed that it be printed at as early a date as possible.

The letter of the chief engineer, dated February 13, 1905, regarding the increasing necessity for flat cars upon the Isthmus to relieve the congested conditions of traffic on the Panama Railroad was taken under consideration.

On motion of Mr. Parsons it was agreed that the Commission should call for bids for 150 dump cars, with the right to call for 150 more within six months after signing the contract.

The chairman then read communication from Major Gallagher, purchasing and shipping agent, regarding his recommendation for the appointment of Mr. S. L. Lupton as agent at New Orleans, the necessity of having a representative of the Commission to superintend the transportation of the mules and horses recently purchased by the Commission, and requesting that authority be given for the temporary employment of Mr. Lupton (in case his permanent appointment is not authorized) to represent the Commission at a salary of \$5 per day and expenses.

Mr. Grunsky moved that the appointment of an agent at New Orleans be deferred, and that Mr. Lupton be authorized to superintend the transportation of recently purchased mules and horses from Kansas City to New Orleans at a salary of \$5 per day and expenses.

Mr. Grunsky's motion was lost, the vote being: Aye, Mr. Grunsky and Mr. Harrod. Nay, Chairman Walker, Mr. Parsons, and Mr. Burr.

Chairman Walker then moved that Mr. Lupton be appointed assistant purchasing and shipping agent at New Orleans, as recommended by Major Gallagher.

The vote resulted: Aye, Chairman Walker, Mr. Parsons, and Mr. Burr. Nay, Mr. Grunsky and Mr. Harrod, and the chairman thereupon declared the motion carried.

Governor Davis's recommendation as contained in his letter of February 9, 1905, relative to increasing the salary of Rev. P. O. Russell, chaplain at the Ancon Hospital, was considered, and on motion of Mr. Parsons it was resolved that the Commission does not see its way clear to increase the salary of the chaplain.

The recommendation of the chief engineer, dated February 13, 1905, that in view of the valuable services rendered by Mr. Ricardo Arango, he be appointed as assistant engineer at a regular salary of \$250 per month to take effect March 1, was approved.

The request of Wm. M. Wood, chief clerk, Isthmus of Panama, for an increase of salary from \$2,000 to \$2,400 per annum, together with favorable recommendation by Mr. Geo. C. Schafer, disbursing officer, was read by the chairman.

On motion of Mr. Grunsky, Mr. Wood's salary was ordered increased from \$2,000 to \$2,400, to take effect March 1, 1905.

The communication from the chief engineer, dated February 14, 1905, recommending the complete duplication of all existing orders for Lidgerwood unloaders, with their carrying cars, for Marion ballast unloaders, and for Jordan bank spreaders was laid before the Commission.

On motion of Mr. Parsons, it was decided to ask for bids for same through advertisement.

The letter from Governor Davis, dated February 9, 1905, regarding the payment of a small sum of money to witnesses summoned before the circuit court of the Zone by Judge Kyle, was read and ordered referred to the auditor.

The correspondence forwarded by Mr. E. C. Tobey, chief of material and supplies department, relative to the probable requirements in the way of explosives for the year 1905, was read by the chairman.

After discussion Mr. Parsons moved that the entire correspondence be referred to Mr. Wallace for comment upon discrepancies therein.

Mr. Burr called attention to a list of requisitions from the Isthmus which had not yet been filled, and presented the following motion:

That the list of requisitions given by Mr. E. C. Tobey in his letter of February 14, addressed to William H. Burr, Isthmian Canal Commission, and the list given in the memorandum of February 14, and signed by W. C. Gorgas, chief sanitary officer, be referred to the purchasing agent for examination and report to the Commission at the earliest practicable date, giving the dates of action on the various requisitions noted, the date of shipment, in case shipment has been made, and the present condition of these requisitions of the two lists which have not yet been filled.

Mr. Burr's resolution was adopted.

The meeting adjourned, subject to the call of the chairman, at 5.50 o'clock p. m.

EIGHTY-SECOND MEETING.

EVENING STAR BUILDING,
Washington, D. C., March 1, 1905.

The Commission met at the call of the chairman at 12.20 p. m.

Present: Chairman Walker, Messrs. Burr, Grunsky, and Harrod.

Absent: General Davis, on duty on the Isthmus of Panama, and Mr. Parsons.

The reading of the minutes of the eighty-first meeting was dispensed with.

The chairman laid before the meeting the communication from the chief engineer, dated February 14, 1905, recommending the appointment of Mr. Fred Bennett as assistant engineer in his department to assist in the installation of excavating machinery in Culebra cut and later on to assist in the erection of ice plants on the Isthmus.

On motion of Mr. Burr, the appointment of Mr. Bennett as assistant engineer, at a salary of \$250 per month, was approved, subject to the action of the Civil Service Commission.

Commissioner Harrod presented the following resolution, which was unanimously adopted.

Resolved, That the resolution of August 18, 1904, relative to purchases by the Commission, be modified to read as follows:

That hereafter all purchases of machinery, materials, and supplies shall be made after due advertisement inviting public competition, unless in the judgment of the chairman or of the Commission, if in session, there exists an emergency requiring such purchase in open market or otherwise.

The chairman presented the opinion of the general counsel in re "Administration of the estates of American citizens employees of the Commission or of the Canal Zone government, who die in the Canal Zone leaving small estates."

The chairman also read draft of an act prepared by the general counsel relative to the same entitled "An act providing for an inexpensive method of administration upon estates of employees of the government of the Canal Zone or of the Isthmian Canal Commission who are citizens of the United States and who die in the Canal Zone, Isthmus of Panama, leaving estates of small value upon which administration is deemed inadvisable."

Mr. Burr moved the adoption of the act as read.

A vote was taken on the motion, and the following named voted aye: The Chairman, Mr. Burr, Mr. Harrod, Mr. Grunsky. Nay, none.

All the members present, constituting a quorum of the Commission, having voted in favor of the motion, the chairman declared it carried, and the act enacted as a law of the Canal Zone.

The chairman then presented draft of a circular prepared by the auditor of the Commission, respecting the traveling expenses of officers and employees of the Commission.

On motion the same was approved and ordered to be printed.

The chairman read a letter from Hon. Henry F. Greene, acting president of the Civil Service Commission, dated February 24, 1905, and inclosing letter from Mr. D. C. Flanagan, foreman of John Shields's Construction Company, Quarryville, Pa., addressed to the Civil Service Commission, in which it was stated that the wages paid pit foremen by the Isthmian Canal Commission are lower than those paid in the United States, and suggesting that that fact might account for the small number of applications received by the Civil Service Commission.

On motion of Mr. Grunsky, the matter was referred to the chief engineer for consideration and comment.

The chairman read for information the report of the auditor, dated February 27, 1905, on the recommendation of the chief engineer (dated January 22, 1905), that in order to simplify matters a distinction be made between the words "employees" and "appointees," recommending no change be made in the designation.

Copies of the report were ordered sent to Governor Davis, the chief engineer, the disbursing officer of the Canal Zone, and the chief of the department of material and supplies.

The general counsel, who was present, then presented a translation of the old Spanish civil code, which was ordered to be printed.

By invitation of the chairman, Miss M. Eugenie Hibbard, chief nurse at Ancon Hospital, appeared before the Commission and gave valuable information respecting that institution and its needs.

Recess was taken at 1.20 o'clock p. m.

The Commission reassembled at 3 o'clock p. m.

The chairman read communication from Governor Davis, dated February 14, 1905, respecting the cost of construction of the proposed road to the Savannas from Caledonia Bridge to the limits of the Canal Zone, with report of Assistant Engineer Carlton E. Davis advising upon the same.

The matter was ordered referred to the committee on engineering.

The chairman laid before the meeting the opinion of the general counsel in re contract between the French Canal Company and the Panama Railroad Company for the use and control of certain tracks in the vicinity of Cristobal-Colon, and calling attention to the fact that the general counsel concurred in the view entertained by the chief engineer, "that there is nothing in the contract which prevents the canal company from making such use of these tracks as it may see fit."

On the motion of Commissioner Harrod, the report was accepted and adopted; and copies ordered sent to Governor Davis, the chief engineer, and the Panama Railroad Company.

A number of appointments made by the chairman since the meeting of February 17 were approved, and also the weekly reports of appointments, promotions, resignations, etc., of the chief engineer for the weeks ending February 4, February 11, and February 18, 1905, were approved, subject to civil-service rules.

APPOINTMENTS MADE BY THE COMMISSION AT THE WASHINGTON OFFICE SINCE THE MEETING OF FEBRUARY 17, 1905.

For service at Washington, D. C.

SECRETARY'S OFFICE.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.
Anderson, Alfred	Assistant purchasing and shipping agent, N. Y.	Feb. 24, 1905	Feb. 24, 1905	\$2,400 per year.
Gallagher, Maj. H. A. ..	Purchasing and shipping agent.	Feb. 1, 1905	Feb. 1, 1905	\$4,800 per year.
Waters, Sarah	Clerk (temporary).....	Feb. 25, 1905	Feb. 25, 1905	\$75 per month.

For service on the Isthmus of Panama.

EXECUTIVE DEPARTMENT.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.
Branham, A. R.	Stenographer.....	Feb. 21, 1905	Mar. 1, 1905	\$1,500 per year.
Bovay, H. E. ....	.....do.....	Feb. 24, 1905	Mar. 7, 1905	\$1,200 per year.
Davies, James.....	.....do.....	.....do.....	Feb. 28, 1905	Do.
Hutton, W. W. ....	.....do.....	.....do.....	.....do.....	\$1,500 per year.
Rosenthal, Hyman L. ....	.....do.....	Feb. 20, 1905	Mar. 7, 1905	Do.
Thomson, John .....	.....do.....	.....do.....	Mar. 1, 1905	Do.

REPORT OF THE ISTHMIAN CANAL COMMISSION.

309

For service on the Isthmus of Panama—Continued.

HEALTH DEPARTMENT.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.
Cassaraw, Wm. F.	Interne.....	Feb. 24, 1905	Mar. 7, 1905	\$50 per month.
Darby, Dr. Taylor	do.....	do.....	Feb. 28, 1905	Do.
Dougherty, S. A.	Nurse	Feb. 25, 1905	Mar. 14, 1905	Do.
Drew, Anna L.	do.....	Feb. 24, 1905	Mar. 7, 1905	Do.
Gardner, Dr. M. E.	Interne.....	Feb. 18, 1905	Feb. 28, 1905	Do.
Holmes, Amy B.	Nurse	Feb. 24, 1905	Mar. 7, 1905	Do.
Haines, Dr. A. L.	Physician.....	Feb. 17, 1905	Apr. 4, 1905	\$1,800 per year.
Killa, Harry.....	Stenographer.....	do.....	Feb. 21, 1905	\$1,500 per year.
Prichard, Ida A.	Nurse	Feb. 24, 1905	Mar. 7, 1905	\$50 per month.
Vollum, P. E.	Sanitary Inspector.....	Feb. 25, 1905	Feb. 28, 1905	\$100 per month.

MATERIAL AND SUPPLIES DEPARTMENT.

Falchild, C. H.	Bookkeeper	Feb. 20, 1905	Feb. 28, 1905	\$1,200 per year.
McFarland, James	Superintendent float- ing equipment La Boca.	Jan. 16, 1905	Jan. 16, 1905	\$200 per month.
Stancil, Henry T.	Clerk.....	Feb. 17, 1905	Feb. 21, 1905	\$1,800 per year.
Vannah, Lorenzo C.	Stock clerk.....	Feb. 20, 1905	Feb. 28, 1905	\$1,400 per year.

OFFICE DEPUTY AUDITOR.

Cornell, Henry.....	Stenographer.....	Feb. 16, 1905	Feb. 25, 1905	\$1,500 per year.
Forman, Jacob C.	Bookkeeper	do.....	Feb. 21, 1905	\$2,000 per year.
Simcoe, H. L.	do.....	do.....	do.....	\$1,500 per year.

LEGAL DEPARTMENT.

Gudger, Hezekiel A. ..	Judge, Canal Zone.....	Feb. 24, 1905	Feb. 24, 1905	\$6,000 per year.
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ENGINEERING DEPARTMENT.

Clerks.				
Frostal, Harris.....	Accountant	Feb. 21, 1905	Feb. 28, 1905	\$1,200 per year.
Gerber, Alma C.	Stenographer.....	Feb. 20, 1905	Mar. 4, 1905	\$1,500 per year.
Russell, Ira H.	do.....	Feb. 18, 1905	Mar. 1, 1905	Do.
Smith, Daniel D. W.	do.....	do.....	Feb. 28, 1905	Do.
Smith, Geo. A.	do.....	do.....	do.....	Do.
Staal, Carl P.	Accountant	Feb. 16, 1905	Feb. 25, 1905	\$1,200 per year.
Talty, Jno. W.	Stenographer.....	Feb. 20, 1905	Feb. 28, 1905	\$1,500 per year.
Steam-shovel men.				
Seiders, M. L.	Craneman.....	Feb. 20, 1905	Feb. 21, 1905	\$165 per calendar month and \$1 extra for each 1,000 cubic yards of excavated material loaded by shovel in his charge during one calendar month in excess of 25,000.
Ergenzinger, W. J.	Pitman	do.....	Feb. 28, 1905	\$75 per month.
Housmann, E. L.	do.....	Feb. 18, 1905	Feb. 21, 1905	Do.
Brown, R. M.	Redman	Feb. 24, 1905	Mar. 8, 1905	\$23.33 per month.
Fitzgerald, John F.	do.....	Feb. 18, 1905	Feb. 28, 1905	Do.
Householder, F. J.	do.....	Feb. 24, 1905	Mar. 8, 1905	Do.
Mole, Marmaduke.....	do.....	Feb. 20, 1905	Feb. 28, 1905	\$75 per month.
Thyson, Bernard.....	Chain man	Feb. 17, 1905	Feb. 28, 1905	\$60 per month.
Steam and air drill men.				
Giles, Jno.	Foreman	Feb. 17, 1905	Feb. 28, 1905	\$125 per month.
Lynch, M.	do.....	do.....	do.....	\$100 per month.
Boyd, J. M.	Workman	Feb. 21, 1905	do.....	\$23.33 per month.
Smith, Jno. L.	do.....	Feb. 17, 1905	Feb. 21, 1905	Do.
Walton, Peter A.	do.....	Feb. 21, 1905	Feb. 28, 1905	Do.

For service on the Isthmus of Panama—Continued.

ENGINEERING DEPARTMENT—Continued.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.
<i>Pile-driving gang.</i>				
Kagens, J. P.	Engineer	Feb. 21, 1905	Mar. 1, 1905	\$100 per month.
Whitby, Thomas	Yard master	Feb. 20, 1905	Mar. 15, 1905	\$120 per month.
Shaw, Chas. A.	Switchman	do	Feb. 28, 1905	\$100 per month.
Reed, W. H.	Switch engineman	Feb. 18, 1905	do	\$115 per month.
Barnes, W. I.	do	Feb. 17, 1905	do	\$83 per month.
Johnson, E. O.	Train man	Feb. 24, 1905	Mar. 7, 1905	\$90 per month.
Chubb, F. A.	Work-train conductor	Feb. 17, 1905	Mar. 1, 1905	\$100 per month.
Duncan, Chas. C.	do	Feb. 24, 1905	Mar. 7, 1905	Do.
McNicol, W. K.	do	do	Mar. 11, 1905	Do.
Cross, Chas.	Carpenter	Feb. 17, 1905	Feb. 28, 1905	Do.
Monin, Emile	do	do	do	\$83.33 per month.
Faulsen, Axel	do	do	do	\$100 per month.
Vernon, Jos. A.	do	Feb. 20, 1905	do	Do.
Dale, W. S.	Blacksmith	do	do	45 cents per hour.
Dickerson, C. O.	do	Feb. 24, 1905	Mar. 11, 1905	Do.
Griffin, P. J.	do	do	Feb. 28, 1905	Do.
Huckeby, D. H.	do	Feb. 25, 1905	Mar. 8, 1905	Do.
Hunter, Chas. D.	do	Feb. 24, 1905	Mar. 7, 1905	Do.
Kerr, J. L.	do	do	do	Do.
Mannoni, L.	do	Feb. 25, 1905	do	Do.
Miller, Jno. C.	do	Feb. 20, 1905	Feb. 28, 1905	Do.
Opperman, Harry	do	Feb. 24, 1905	Mar. 7, 1905	Do.
Christopheron, W.	Boiler maker	Feb. 17, 1905	Feb. 28, 1905	Do.
Younge, H. F.	do	Feb. 20, 1905	do	Do.
Miller, Jno. R.	Machinist	Feb. 24, 1905	Mar. 11, 1905	Do.
Blum, Robt.	Locomotive machinist	Feb. 17, 1905	Feb. 22, 1905	Do.
Brawshaw, H. W.	do	do	Feb. 21, 1905	Do.
Foulks, F. P.	do	Feb. 24, 1905	Mar. 7, 1905	Do.
Ploth, Jacob	do	Feb. 17, 1905	Feb. 28, 1905	Do.
Wright, L. I.	do	Feb. 20, 1905	Mar. 8, 1905	Do.
Carney, Frank	Molder	Feb. 24, 1905	Mar. 14, 1905	Do.
Collins, Jno. I.	do	Feb. 16, 1905	Mar. 21, 1905	Do.
Goebel, H. W.	do	Feb. 20, 1905	Feb. 28, 1905	Do.
Beatty, Burt	Pipe fitter	Feb. 25, 1905	Mar. 15, 1905	Do.
Cook, Ferd. A.	do	Feb. 20, 1905	Feb. 21, 1905	Do.
Green, Geo. E.	do	Feb. 25, 1905	Mar. 7, 1905	Do.
Green, Harry	do	do	do	Do.
Magnell, A. M.	do	do	Mar. 14, 1905	Do.
Johnson, J. F.	do	Feb. 24, 1905	Mar. 7, 1905	Do.

The recommendation of Governor Davis for the appointment of an attendant at Bas Obispo, to take charge of the dispensary, at a salary of \$50 per month (Colombian silver), with board and lodging, was approved.

The appointment of Mr. James McFarland as superintendent of floating equipment at La Boca, effective January 16, 1905, was also approved, subject to the action of the Civil Service Commission.

Governor Davis's reports showing change in the personnel of the Canal Zone government during the month of December, 1904, and his report on commutation of quarters for the month of January, 1905, were approved.

At 3.25 p. m. the meeting adjourned, subject to the call of the chairman.

EIGHTY-THIRD MEETING.

EVENING STAR BUILDING,
Washington, D. C., March 6, 1905.

The Commission met at the call of the chairman at 11 o'clock a. m.
Present: Chairman Walker, Messrs. Parsons, Harrod, and Grunsky.
Absent: General Davis, on duty on the Isthmus of Panama, and Mr. Burr, because of miscarrying of mail.

The minutes of the meetings of February 28 and March 1, 1905, were read and approved.

The chairman read a cablegram from the chief of the department of material and supplies and his requisition No. 323-C, stating that 12,000 barrels of cement would be required for the remainder of the year 1905.

On motion it was ordered that 1,000 barrels of cement be purchased from the option now held by the Commission.

The request of the chief engineer that means be found to induce the contractors to deliver the water pipe and specials for the Panama waterworks, with his recommendation that the shipments be made in small lots by steamship from New Orleans, was considered, and Mr. Harrod moved that the purchasing and shipping agent be directed to furnish the general counsel with a list of all contractors in default as to the delivery of materials, and that the general counsel advise the Commission what steps should be taken to protect the interests of the Government; also that the purchasing and shipping agent be authorized to proceed to Philadelphia for the purpose of expediting the shipment of pipe and specials for the Panama waterworks.

The resolution was adopted.

The chairman read a communication from the chief engineer, dated February 20, 1905, transmitting report of Mr. Carlton E. Davis, engineer in charge of waterworks and sewers, in reference to a consolidated water supply for the machinery at work in the Culebra excavation, and estimating the cost of the same at approximately \$82,500.

On motion of Mr. Harrod the matter was referred to the committee on engineering plans.

The report of the chief engineer, dated February 21, 1905, respecting the reorganization of his department, was referred to the committee on engineering.

The chairman read for information a letter from the chief of the department of material and supplies, dated February 20, 1905, requesting that he be duly advised of the approval of the chief engineer's recommendation for the purchase of 3,500 tons of 75-pound steel rail, known as American Society Standard, in order that he may furnish the Commission with proper shipping instructions and marks for the material.

The chairman read a letter from the chief engineer, dated February 16, 1905, recommending the employment of a drafting force in his principal office, to be in charge of an assistant engineer at \$250 per month, with a chief draftsman at \$200 per month, 4 first-class American draftsmen and calculators (2 at \$175 per month and 2 at \$150 per month); also 2 men at \$125 per month and 2 men at \$100 per month.

On motion, the recommendations of the chief engineer were approved.

The recommendation of the chief engineer, dated February 17, 1905, that a duplicate order be placed for a stone-crusher plant similar to the one for which requisition has been made, consisting of a No. 8 and No. 5 crusher in combination, was considered, and, on motion of Mr. Harrod, it was resolved that advertisement be made as requested by the chief engineer for duplication of the rock-crushing plant already ordered, and that bids be accompanied by an option for 4 No. 5 rock crushers.

The request of the chief of the material and supplies department, dated February 18, 1905, that the contract under which split wood pulleys were furnished be extended, and that additional pulleys be pur-

chased, was approved, and the request was ordered referred to Major Gallagher, purchasing and shipping agent, for action.

The chairman read a communication from the chief of the department of material and supplies, dated February 16, 1905, requesting that authority be given his office to order such articles as may be necessary for the commissary directly from the Panama Railroad Company in New York, and that Mr. Anderson or the proper railway official be instructed to fill such requisitions without delay and render bills for the same to the department of material and supplies on the Isthmus.

The request was denied. Purchases for the commissary are to be made through the Commission's purchasing department.

There was read for information a letter from the chief engineer, dated January 20, 1905, advising that the steamer *Veronique*, now in the harbor of Panama, was for sale, the price asked being £30,000.

The communication from Mr. Carl A. Strom, mechanical engineer, referred by the chief engineer, under date of February 17, 1905, concerning the absence of fusible plugs on the boilers of the Bucyrus steam shovels now being received on the Isthmus, was ordered referred to the purchasing and shipping agent, with directions that that company be requested to furnish fusible plugs for all boilers of steam shovels sent to the Isthmus.

The chairman laid before the meeting a communication from Mr. E. C. Tobey, chief of the department of material and supplies, dated February 16, 1905, inquiring as to the policy of the Commission in regard to furnishing supplies to the canteen at Cristobal and the railroad mess at the Washington House heretofore supplied by the railroad commissary.

After discussion, Mr. Parsons moved that the chairman be requested to confer with the Secretary of War, and if the latter approves, that the canteen at Cristobal and other canteens on the Zone that may be approved by the governor as chiefly engaged in providing accommodations to employees of the Commission and of the railroad company shall be entitled to the privileges of the commissary.

On motion the resolution was adopted.

Mr. Parsons also presented the following:

Resolved, That the hotel at Colon, known as the Washington House, property of the Panama Railroad Company, be entitled to the privileges of the commissary, as in the past.

The resolution was adopted.

The chairman read for information a communication from the chief engineer, dated February 17, 1905, respecting the adoption of methods to regulate and control expenditures that will not retard the work of the Commission.

The chairman stated that the recommendations of the chief engineer, contained in his letter, had been anticipated by former action of the Commission, and that the chief engineer had been notified of the same.

The recommendations of Chief Engineer Wallace, dated February 17, 1905, as to double tracking of the Panama Railroad between a point near Pedro Miguel and La Boca (a distance of 8 miles) and from the east bank of the Chagres River near Barbacoas to Colon (a distance of 23 miles), and his request for the necessary supply of steel rails, etc., were ordered referred to the committee on engineering plans.

Regarding the request of the purchasing and shipping agent for

authority to hire an expert machinist to supervise purchases of machinery at a salary of \$7 per day, or less, it was ordered that in the hiring of such experts as may be needed from time to time it is desirable that their employment be arranged through the Commission.

The communication from Governor Davis, dated February 16, 1905, respecting Mr. M. C. Rerdell, now holding the office of municipal judge and treasurer at Colon, and recommending that so long as he performs the duties of municipal treasurer his salary, from and after February 1, 1905, be fixed at \$1,500 per annum, was ordered referred to the general counsel.

A letter from Mr. E. A. Drake, vice-president of the Panama Railroad Company, dated March 2, 1905, was read, advising that the ice manufactured at the railroad's ice plant at Colon will be furnished at the price of one-half cent per pound, or at \$10 per ton of 2,000 pounds, through the commissary department of the Commission.

On motion of Major Harrod, it was resolved that the arrangement suggested by Mr. Drake be temporarily made, and that Mr. Drake and Mr. Tobey, chief of the department of material and supplies, be notified to that effect.

A letter was read from Mr. Joel B. Erhardt, president Public Accountants' Corporation, New York City, dated March 2, 1905, notifying the chairman of the acceptance of the Commission's proposition of the 1st instant respecting a system of accounting to be adopted by the Commission, compensation to be at the rate of \$35 per day from the date of leaving New York for the Isthmus until return to New York, with transportation to and from the Isthmus, and after return to New York compensation to be \$30 per day until the completion of the work, the gross sum not to exceed \$5,500.

The recommendation of Doctor La Garde, superintendent of Ancon Hospital, that certain patients be transferred to the sanitarium at Taboga, with indorsements of Doctor Carter, acting director of hospitals; Colonel Gorgas, chief sanitary officer, and Governor Davis, was discussed.

Mr. Grunsky moved that the Commission approve the use of the sanitarium at Taboga as a temporary residence for convalescents, and that the chief sanitary officer be requested to furnish the Commission with plans showing what furniture and other equipment may be necessary, in accordance with his recommendation.

The resolution was adopted.

The recommendation of Mr. E. C. Smith, acting chief sanitary inspector, that his office be provided with an additional clerk at a salary of \$100 per month, with favorable indorsements of the chief sanitary officer and Governor Davis, was approved.

Regarding the request of Rev. P. O. Russell, chaplain at Ancon Hospital, for an increase of salary to \$100 per month, with favorable indorsements of Doctor La Garde, superintendent of Ancon Hospital; Dr. H. R. Carter, acting director of hospitals; Colonel Gorgas, chief sanitary officer, and Governor Davis, the chairman stated that the matter had already been acted upon by the Commission at its meeting on February 28, 1905, when it was resolved "that the Commission does not see its way clear to increase the salary of the chaplain."

The recommendation of Arthur T. Kendall, chemist, Ancon laboratory, for the increase of the salary of Mr. A. J. Lewis, laboratory

assistant, from \$100 per month, silver, to \$150 per month, silver, with favorable indorsements of Colonel Gorgas, chief sanitary officer, and Governor Davis, was approved.

The recommendation of Doctor Carter, acting director of hospitals, with the favorable indorsements of the chief sanitary officer and Governor Davis, that an additional physician be allowed, at a salary of \$2,490 per annum, for duty along the line of the canal, was approved.

It was directed that the chief sanitary officer be called upon, through the governor of the Canal Zone, to nominate a physician for the place and to furnish the Commission with his record.

The request of the chief engineer that he be given authority to construct six hotels of the same kind as were authorized for erection at Culebra was approved. Plans for the same, and also plans for the Culebra quarters, are to be filed at the Washington office.

A communication from the chief sanitary officer, dated February 18, 1905, respecting increase in salaries of the chief nurse at Ancon Hospital and of other nurses, transmitted by Governor Davis with his remarks, was referred to the committee on sanitation, pending the receipt of a report from Miss Hibbard, chief nurse at Ancon Hospital.

A communication from the chief engineer, dated February 1, 1905, recommending certain promotions in order to adjust inequalities in salaries, to take effect March 1, 1905, and recommending an additional force for the rapidly increasing work of the engineering and construction department, was ordered referred to the executive committee.

A communication from the purchasing and shipping agent, dated March 2, 1905, referring to a requisition from the Canal Zone calling for a long list of utensils to be furnished for the use of the surgeon in charge of Ancon Hospital, and suggesting that the commissary department keep on hand a supply of such articles for sale to officials and others entitled to the privilege, was ordered referred back to Major Gallagher, purchasing and shipping agent, with instructions that the requisition be filled so far as the range and proper range furniture are concerned.

The Commission took a recess at 1.10 o'clock p. m.

The Commission reassembled at 2.50 o'clock p. m.

The recommendations of the chief engineer for the employment of Mr. T. J. Slattery, locomotive engineman, at \$125 per month; of Mr. J. Berger and Mr. D. Maguire, switch enginemen, at \$100 per month; also the promotions of Edmund T. Patterson to chief clerk, grade 1, at \$150 per month; Mr. Charles L. Parker to clerk, grade 3, \$125 per month; Mr. George W. Steiner to foreman, third grade, at \$125 per month, and Mr. R. F. Craig, timekeeper, to timekeeper, second grade, at \$100 per month, were approved, subject to the action of the Civil Service Commission.

The request of the chief sanitary officer, contained in his letter of November 30, 1904, with indorsement of Governor Davis, respecting the personnel of the hospital for chronic cases to be established at Miraflores, was then considered, and the chairman stated that the same had already been authorized, and that Governor Davis be notified to that effect.

The recommendations of the chief engineer, contained in his letter of February 20, 1905, for the promotion of Mr. Carl A. Strom, chief mechanical engineer; Mr. Charles A. List, resident engineer, Cristo-

bal, and Mr. M. O. Johnson, supervising architect, to salaries of \$300 per month, were approved on motion of Major Harrod.

The recommendation of the chief engineer, contained in his communication of February 9, 1905, that Capt. Edward L. King, general quartermaster, be authorized to sign vouchers for sums of \$100 or less, together with the report of Mr. W. P. Armstrong, auditor, thereon, was ordered referred to the executive committee.

Regarding the request of Mr. Cloyd A. McIlvane, an employee of the engineering department of Panama, addressed to the Hon. Theodore E. Burton, House of Representatives, and by him referred to the Commission for a copy of the proceedings of the Isthmian Canal Commission, a copy of the report of the Secretary of War, etc., the secretary was directed to notify Mr. McIlvane that his course in writing Mr. Burton was not proper, and that he should apply for information through the head of the department in which he is employed.

Mr. Harrod moved that the report of the engineering committee containing recommendations for the prosecution of work on the canal on a sea-level basis be now considered.

Mr. Grunsky moved, as an amendment, that the report of the committee on engineering, bearing date of February 14, 1905, relating to conduct of engineering work on the Isthmus, and to the type of canal to be constructed, be referred to the committee on engineering plans for its consideration and comment.

Mr. Parsons moved, as a substitute, that in the absence of the chairman of the committee on engineering discussion of the matter be postponed until the meeting at the Panama Railroad office in New York City at 10 o'clock on March 9, 1905.

Mr. Parsons's motion was adopted.

The chairman read for information a letter from the chief engineer, dated February 21, 1905, announcing the receipt of a telegram from Assistant Engineer Dose, stating that the last hole at Buenavista located bed rock at a depth of 138.2 feet below datum.

The chief engineer's letter, dated February 20, 1905, announcing his intention of substituting air drills for the present steam drills now in use, and asking that 6 modern air compressors of the Rand Imperial type of air compressors and 75 more pneumatic drills be purchased—25 for delivery before July 1, 25 before October 1, and 25 before December 31, 1905, was ordered referred to the committee on engineering.

The chief engineer's letter of February 21, 1905, relating to cars and engines in connection with construction work and the "layout" at Matachin, and asking that he be authorized to finish the construction of shops at an estimated cost of \$40,000, was referred to the committee on engineering plans.

The chairman laid before the meeting the opinion of the general counsel as to the name in and by which contracts should be entered into by the Commission for material and supplies for use in the construction of the Isthmian Canal.

On motion of Mr. Parsons, it was resolved that contracts should be drawn up by the purchasing and shipping agent, certified by him, and thereupon forwarded to the general counsel for his approval as to form, and that the chairman be designated as the proper person to sign contracts.

Mr. Grunsky, of the committee on sanitation, presented the report of the chief sanitary officer, covering operations on the Isthmus from May 4 to December 31, 1904, and asked that it be printed.

On motion the request was approved.

Mr. Grunsky presented the following resolutions:

Resolved, That in accordance with the recommendation of the chief sanitary officer under date of February 18, 1905, transmitted by Governor Davis with a favorable recommendation, the establishment of emergency hospitals and dispensaries along the line of the canal be authorized as follows:

For Panama and Colon: A dispensary to be located at Panama or elsewhere, as may be convenient, with 1 medical officer and interne.

At Pedro Miguel: A 10-bed hospital and dispensary, with 1 medical officer.

At Paraiso: A 16-bed hospital and dispensary, with 1 medical officer.

At Culebra: A 20-bed hospital and dispensary, with 2 medical officers.

At Empire: A dispensary and an attendant.

At Bas Matachin: A 16-bed hospital and dispensary, especially fitted for emergency surgery, with 1 medical officer.

At Gamboa and Bas Obispo: One 20-bed hospital and dispensary, with 1 medical officer.

From Cristobal to Gatun: A dispensary with 1 medical officer and an interne, preferably quartered at Colon hospital.

And be it further resolved, That the hospitals as above enumerated be allowed the same force of attendants as are allowed in the general scheme of organization of the health department to emergency hospitals.

Also resolved, That the compensation for the above-named positions do not exceed those heretofore fixed, or that may hereafter be fixed, for emergency hospitals and dispensaries, unless otherwise authorized by the Commission; and be it

Also resolved, That the recommendations of the chief sanitary officer for the promotion of internes to the positions along the line of the canal be approved; and finally, be it

Resolved, That the additional employees made necessary by this scheme be selected through the proper channels as required from time to time by the chief sanitary officer.

Mr. Grunsky's resolutions were adopted.

The Commission adjourned at 4.15 o'clock p. m.

EIGHTY-FOURTH MEETING.

BOARD ROOM, PANAMA RAILROAD COMPANY,
New York, March 9, 1905.

The Commission met at the call of the chairman at 10 a. m.

Present: Chairman Walker, Messrs. Harrod, Burr, Parsons, and Grunsky.

Absent: General Davis, on duty on the Isthmus of Panama.

Mr. Grunsky was appointed secretary pro tempore.

The reading of the minutes of the meeting of March 6, 1905, was dispensed with.

There was laid before the Commission a communication from the purchasing and shipping agent relating to the request of the chief engineer, per cable, that if possible 7 by 9 inch by 9 foot ties be substituted for the 6 by 8 inch by 8 foot ties, originally asked for by him. The proposition submitted by the contractors, Brown & Co., in reference to this matter was as follows:

If the Commission will accept 4,202 6 by 8 inch by 8 foot and up ties, hewn on two sides, which we have shipped on the *Newhall* for our private account, at 65 cents per tie, in addition to the number mentioned in our contract, we will furnish 25,000 7 by 9 inch by 9 foot ties in place of that number of 6 by 8 inch by 8 foot ties provided for by our contract.

Brown & Co. further offered to furnish, in case the Commission desires, "an additional number of ties—say from 50,000 to 150,000—7 by 9 inch by 9 foot ties at contract price, time of delivery to be agreed upon to meet the wishes of the Commission."

On motion of Mr. Burr, this matter was referred to the chairman with power to act, securing still more of the larger sized ties in lieu of the 6 by 8 inch by 8 foot ties if possible.

The bill of Frank L. Joannini for \$829 for translating the Civil Code of Panama from Spanish into English was approved and ordered paid.

Mr. Grunsky presented the following resolution:

Resolved, That in all cases in which lowest bids conform to the requirements of specifications awards may be made to lowest bidders by the purchasing and shipping agent of this Commission; otherwise the matter shall be referred to the Commission for adjudication.

Adopted.

In the matter of the proposed retransfer of the commissary to the Panama Railroad Company it was moved by Mr. Parsons that arrangements be made with the Panama Railroad Company to take over the Commissary Department, leaving Mr. Tobey in charge thereof, without additional compensation.

This motion prevailed, Mr. Grunsky alone voting against it, as he favored delay of a few weeks before taking final action.

The request, by cable, of the chief engineer for a duplication of the order for 2,500 tons of 70-pound steel rails was considered, and it was moved by Mr. Grunsky that the purchase be made by advertisement for competitive bids. This motion was carried, the chairman, in voting against the same, explaining that he was in favor of purchasing the rails under the Panama Railroad Company's contract, thereby saving time and probably money.

The request of Doctor La Garde, dated December 5, for allowance of forage for 2 horses, addressed to the Quartermaster-General of the Army, with 12 indorsements, was read for information.

The chairman called attention to the fact that on January 21, 1905, the stabling of 2 horses, the private property of the superintendent of Ancon Hospital, at the section stables, was authorized, as was also the use of the shops at the section for the repair of the superintendent's carriage and the shoeing of his 2 private horses.

In the matter of pay allowance to Mr. Hawkins Taylor, formerly an employee of the Commission, it was—

Resolved, That the resolution of December 22, 1904, in reference to leave of absence of H. W. Taylor, be rescinded; that leave of absence, with pay, from September 14 to and including September 30, 1904, be approved, and that his claim for pay subsequent to September 30, 1904, be disapproved.

Mr. Harrod, the chairman of the committee on engineering plans, submitted the following report, which was accepted and approved:

The committee on engineering plans, to which was referred the project of the chief engineer, accompanied by a plan for the increase of the efficiency of the Bas Matachin shops by enlarging the present accommodations and providing additional machinery to three times their present capacity, at a cost of about \$190,000, return the same with the recommendation that the Commission authorize the immediate construction of the necessary buildings, and advertise for bids for the machinery as soon as the requisition therefor is received.

The same committee submitted the following, which was also accepted and approved:

The committee on engineering plans, to which was referred the project by the chief engineer for an additional water supply by the construction of a dam on the Comacho

River, with supply lines to points from Culebra northward returns the same to the Commission with a recommendation for approval. The commencement of work should be authorized and bids for pipe called for as soon as the requisition is received.

It was determined to be desirable that Mr. Maltby should at once visit the Isthmus for conference with the chief engineer and for further service there or in Washington, as may hereafter be directed.

Mr. Burr, chairman of the committee on engineering, made the following report:

The committee on engineering recommends the approval of the plan of the chief engineer, as set forth in his letter of February 21, for the reorganization and extension of the forces of the engineering and construction department.

The committee on engineering recommends the approval of the recommendations of the chief engineer contained in his two letters of February 21, covering the promotion of those members of his engineering and clerical forces given in those letters, as follows:

Name.	Present rating.	Present pay.	Proposed rating.	Proposed pay.
Barbour, J. H.	Clerk, class 3.	\$125.00	Chief clerk	\$150.00
Boynston, L. T.	Clerk, class 2.	100.00	Clerk, class 3.	125.00
Cowan, A. G.	Clerk, class 1.	83.33	Clerk, class 2.	100.00
Gallardo, I.	do	83.33	do	100.00
Gould, C. M.	Clerk, class 3.	125.00	Chief clerk	150.00
Maguire, J. M.	do	125.00	do	150.00
McFarland, E. C.	do	125.00	do	150.00
Patchell, W. J.	Clerk, class 2.	100.00	Clerk, class 3.	125.00
Phelan, Edward	Rodman, class 2.	83.33	Clerk, class 2.	100.00

The committee on engineering recommends the approval of the recommendations of the chief engineer in his letter of February 21, covering the promotion of certain members of the corps engaged under the supervising architect, as follows:

Name.	Present rating.	Present pay.	Proposed rating.	Proposed pay.	Position on organization scheme sheet.
Arias, Ernest	Assistant timekeeper.	\$50.00	Assistant foreman, class 2.	\$60.00	Timekeeper.
Betancourt, R.	Assistant foreman, grade 2.	60.00	Assistant foreman, grade 3.	75.00	Foreman Panama road.
Bowles, E. W.	Building supervisor.	150.00	Superintendent	200.00	Superintendent.
Burt, A. M.	Instrument man.	175.00	Assistant engineer, class 2.	200.00	Chief draftsman.
Caldwell, G. A.	Level man, class 1.	100.00	Level man, class 2.	125.00	Draftsman.
Carmick, E. S.	Rod man, class 2.	83.33	Clerk, class 2.	100.00	Pay roll department.
Daly, Henry E.	Foreman, class 2.	100.00	Foreman, class 3.	125.00	Foreman, Culebra.
Diaberry, J. T.	Plumber.	6.45	do	125.00	Foreman, division.
Dixon, Robert.	Assistant foreman, class 3.	75.00	Foreman, class 2.	100.00	Foreman, job.
Du Bois, L. E.	Foreman, class 1.	83.33	do	100.00	Do.
Duey, W. J.	Assistant foreman, class 3.	75.00	do	100.00	Do.
Haller, G. N.	Rodman, class 2.	83.33	Level man, class 1.	100.00	Draftsman.
Hulen, E. S.	Timekeeper, class 2.	100.00	Clerk, class 3.	125.00	Material check clerk.
Newbold, W. R., jr.	Foreman, class 2.	100.00	Foreman, class 3.	125.00	Foreman, Panama.
Pintt, J. B.	Foreman, class 1.	83.33	Foreman, class 2.	100.00	Foreman, job.
Read, W. H.	Foreman, class 2.	100.00	Foreman, class 3.	125.00	Foreman, division.
Seldy, J. J.	do	100.00	do	125.00	Do.
Renaut, A.	Rodman, class 1.	75.00	Level man, class 1.	100.00	Draftsman.
Uffendell, W. G.	Level man, class 2.	125.00	Transit man.	150.00	Do.

c Per hour.

REPORT OF THE ISTHMIAN CANAL COMMISSION.

819

The following list of promotions, as recommended by the chief engineer, was also approved:

Name.	Present rating.	Present pay.	Proposed rating.	Proposed pay.
Anderson, R. H.	Instrument man	\$175.00	Assistant engineer, class 1	\$200.00
Archer, R. I.	Level man, class 1	100.00	Level man, class 3	135.00
Awatama, A.	Rodman, class 1	75.00	Rodman, class 2	85.00
Barrill, G. V.	Transit man	100.00	Instrument man	175.00
Baucus, W. J.	Instrument man	175.00	Assistant engineer, class 2	225.00
Bentley, G. W.	Level man, class 2	125.00	Transit man	150.00
Blackburn, E. J.	do	125.00	do	150.00
Bolts, T. F.	do	125.00	do	150.00
Burgholter, W. E.	Rodman, class 1	75.00	Level man, class 1	100.00
Burnham, R.	Rodman, class 1	75.00	do	100.00
Butters, C. M.	Level man, class 2	125.00	Transit man	150.00
Caballero, C.	Rodman, class 2	85.00	Level man, class 1	100.00
Card, J. A.	Instrument man	175.00	Assistant engineer, class 1	200.00
Carpenter, C. L.	do	175.00	do	200.00
Carver, R. B.	Level man, class 1	100.00	Level man, class 2	125.00
Cater, F. W.	Rodman, class 2	85.00	Level man, class 1	100.00
Clark, H. R.	Level man, class 2	125.00	Transit man	150.00
Davis, C. L.	Level man, class 1	100.00	Level man, class 2	125.00
Dominguez, R.	Rodman, class 1	75.00	Level man, class 1	100.00
Drake, H. P.	do	75.00	do	100.00
Fowler, E. C.	Rodman, class 2	85.00	do	100.00
Griffith, W. F. R.	Transit man	150.00	Instrument man	175.00
Hayes, John	do	150.00	do	175.00
Hugh, J. B.	Draftsman, class 3	125.00	Transit man	150.00
Hortensine, J. L.	Rodman, class 2	85.00	Level man, class 1	100.00
Hortensine, J. W.	do	85.00	do	100.00
Huntingdon, L. M.	do	85.00	do	100.00
Johnson, N. M.	do	85.00	do	100.00
Kingsland, E. B.	Rodman, class 1	75.00	Rodman, class 2	85.00
Kornopp, E. B.	Rodman, class 2	85.00	Level man, class 1	100.00
Lincoln, G. P.	Instrument man	175.00	Assistant engineer, class 1	200.00
Linsey, R. L.	Level man, class 1	100.00	Level man, class 2	125.00
Mannington, J. A.	Rodman, class 1	75.00	Level man, class 1	100.00
Manton, R. B.	Transit man	150.00	Instrument man	175.00
Marshall, C. E.	do	150.00	do	175.00
Mason, A. P.	Level man, class 1	100.00	Level man, class 2	125.00
Masters, F. W.	Rodman, class 2	85.00	do	125.00
McMorrow, J. W.	Level man, class 1	100.00	do	125.00
Obenshain, S. A.	Rodman, class 2	85.00	Level man, class 1	100.00
Phillips, G. P.	Instrument man	175.00	Assistant engineer, class 1	200.00
Quest, G. A.	Rodman, class 2	85.00	Level man, class 1	100.00
Robertson, A. G.	Rodman, class 1	75.00	Rodman, class 2	85.00
Schloter, Paul	do	75.00	Level man, class 1	100.00
Smith, E. C.	Instrument man	175.00	Assistant engineer, class 1	200.00
Sperry, J. L.	Rodman, class 1	75.00	Level man, class 1	100.00
Tenny, M. W.	Instrument man	175.00	Assistant engineer, class 1	200.00
Thom, L. G.	Rodman, class 2	85.00	Level man, class 2	125.00
Thompson, R. M.	do	85.00	do	125.00
Thorne, C. L.	Level man, class 1	100.00	Transit man	150.00
Weedon, G. E.	do	100.00	Level man, class 2	125.00
Wells, G. M.	Transit man	150.00	Instrument man	175.00
Wright, D. E.	Rodman, class 2	85.00	Level man, class 1	100.00
Yocum, A. H.	do	85.00	do	100.00
Young, H. C., Jr.	Transit man	150.00	Instrument man	175.00

The committee on engineering recommends the approval of the proposition of the chief engineer contained in his letter of February 20 regarding the substitution of air drills for steam drills and the purchase of 6 modern air compressors, each with a capacity of 2,500 cubic feet of free air per minute, and the purchase of 75 air drills, to be delivered between July 1 and December 31, 1905, all as set forth in that letter.

The committee on engineering approves the general report of the chief engineer of February 20, 1905, and recommends that it be received and filed.

The committee on engineering recommends that the salary of W. E. Dauchy, division engineer, be increased to \$500 per month from and after March 1, 1905, in accordance with the recommendation of the chief engineer under date of February 21, 1905.

820 REPORT OF THE ISTHMIAN CANAL COMMISSION.

All of the recommendations of the committee on engineering as above noted were approved.

The report of the engineering committee dated February 14, 1905, and relating to the work on the Isthmus and to the type of canal which should be constructed, was taken up for consideration.

This report was still under discussion when the Commission adjourned at 2 p. m.

EIGHTY-FIFTH MEETING.

EVENING STAR BUILDING,
Washington, D. C., March 14, 1905.

The regular monthly meeting of the Commission was called to order at 11 o'clock a. m. by the chairman.

Present: Chairman Walker, Messrs. Burr, Harrod, and Grunsky.

Absent: Governor Davis, on duty on the Isthmus of Panama, and Mr. Parsons.

The minutes of the meeting of March 6 and 9, 1905, were read and approved.

Dr. L. W. Spratling, U. S. Navy, superintendent of Colon Hospital, was called into the meeting, and gave valuable information to the Commission respecting health conditions on the Isthmus, medical supplies, etc.

The following list of appointments made at the Washington office since those announced at the meeting of March 1, 1905, were approved, subject to civil-service regulations:

APPOINTMENTS MADE BY THE COMMISSION AT THE WASHINGTON OFFICE SINCE THE MEETING OF FEBRUARY 28, 1905.

For service at Washington, D. C.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.
Bon Durant, Wm. W.	Clerk (stenographer)	Mar. 1, 1905	Mar. 2, 1905	\$1,400 per year.
Niland, Julia P.	Typewriter	Mar. 8, 1905	Mar. 9, 1905	\$480 per year.
Roman, Julia B.	Stenographer	Mar. 11, 1905	Mar. 11, 1905	\$725 per year.
Rous, Bessie D.	do	do	Mar. 13, 1905	Do.
Weatherbe, Wm. C.	Clerk	Feb. 10, 1905	Feb. 10, 1905	\$2,000 per year.

For service at New York, N. Y.

Evans, Robt. B.	Checker	Mar. 2, 1905	Mar. 2, 1905	\$600 per year.
Nordick, Frank C.	Stenographer	do	Mar. ? 1905	\$1,200 per year.

For service at New Orleans, La.

Lupton, Silas L.	Assistant purchasing and shipping agent.	Mar. 1, 1905	Mar. 1, 1905	\$2,000 per year.
Murray, John A.	Messenger	Mar. 8, 1905	Mar. 11, 1905	\$600 per year.

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REPORT OF THE ISTHMIAN CANAL COMMISSION.

321

For service on the Isthmus of Panama.

EXECUTIVE DEPARTMENT.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.
Harness, James B.....	Stenographer.....	Mar. 2, 1905	Mar. 11, 1905	\$1,200 per year.
Lantz, Harry A.....	do.....	Feb. 27, 1905	Mar. 28, 1905	\$1,500 per year.
Ninas, Geo. A.....	do.....	Feb. 28, 1905	Mar. 22, 1905	Do.
Pretzfelder, Leon.....	do.....	Feb. 27, 1905	Mar. 21, 1905	\$1,200 per year.
Sherwood, Everett.....	do.....	Mar. 10, 1905	Mar. 22, 1905	Do.
Slattery, James A.....	do.....	Feb. 28, 1905	Mar. 28, 1905	\$1,500 per year.

POLICE DEPARTMENT.

Roberts, C. V.....	Police sergeant.....	Mar. 10, 1905	Mar. 21, 1905	\$1,000 per year.
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HEALTH DEPARTMENT.

Bell, Florence.....	Nurse.....	Mar. 7, 1905	Mar. 14, 1905	\$50 per month.
Bidwell, Louise C.....	do.....	do.....	do.....	Do.
Daley, Mary J.....	do.....	do.....	Apr. 18, 1905	Do.
Lyons, Mary L.....	do.....	Mar. 8, 1905	Mar. 14, 1905	Do.
Matts, Minnie M.....	do.....	Feb. 27, 1905	Mar. 7, 1905	Do.
Pope, Amy E.....	Dietist.....	Mar. 2, 1905	Mar. 14, 1905	\$75 per month.
Smith, Sara B.....	Nurse.....	Mar. 11, 1905	Apr. 4, 1905	\$50 per month.

MATERIAL AND SUPPLIES DEPARTMENT.

Carrington, Harley....	Bookkeeper and clerk....	Feb. 27, 1905	Mar. 15, 1905	\$1,200 per year.
Costello, Lawrence.....	Clerk.....	do.....	Mar. 7, 1905	\$720 per year.
Hughes, Patrick J.....	do.....	Mar. 11, 1905	Mar. 21, 1905	\$900 per year.
James, Wm. P.....	Storekeeper.....	Mar. 10, 1905	do.....	Do.
Powell, Fred. H.....	Clerk.....	Feb. 27, 1905	Mar. 14, 1905	Do.
Starkey, C. McF.....	Lumber clerk.....	Mar. 11, 1905	Mar. 28, 1905	\$1,000 per year.
Willson, Fred De S.....	Freight checker.....	Mar. 2, 1905	Mar. 14, 1905	\$900 per year.

DEPUTY AUDITOR'S OFFICE.

McLean, John H., Jr..	Clerk.....	Feb. 27, 1905	Feb. 28, 1905	\$125 per month.
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ENGINEERING DEPARTMENT.

Arango, R.....	Assistant engineer.....	Mar. 1, 1905	Mar. 1, 1905	\$250 per month.
Bennett, Fred.....	do.....	Mar. 2, 1905	Mar. 14, 1905	Do.
Tucker, Hoode.....	do.....	Mar. 7, 1905	Mar. 22, 1905	Do.
Zook, E.....	do.....	Feb. 28, 1905	Mar. 14, 1905	Do.
Keller, J. C.....	Copyist.....	do.....	Mar. 22, 1905	\$900 per year.
McDonough, Bard L.....	Stenographer.....	Mar. 1, 1905	Mar. 14, 1905	\$1,500 per year.
Thorne, Clarence P.....	do.....	Feb. 28, 1905	Mar. 7, 1905	Do.
Berger, Geo. H.....	Rodman.....	Mar. 2, 1905	do.....	\$83.33 per month.
Hobday, W. H.....	do.....	Mar. 10, 1905	Mar. 21, 1905	Do.
Haverstick, E. W.....	do.....	do.....	do.....	Do.
Johnson, Tiff.....	do.....	Mar. 11, 1905	Mar. 22, 1905	Do.
Annett, C. F.....	Superintendent telegraph, telephone, and electric light in Canal Zone.	Feb. 27, 1905	Mar. 14, 1905	\$225 per month.
O'Neill, Thos. J.....	Assistant superintendent telegraph, telephone, and electric light in Canal Zone.	Mar. 1, 1905	do.....	\$150 per month.
Martin, Oscar F.....	Tunnel and shaft work... Superintendent excavating department.	Feb. 28, 1905	Apr. 4, 1905	\$125 per month.
Gradison, Jos.....	Work-train conductor.....	Mar. 1, 1905	Mar. 21, 1905	\$175 per month.
Brown, T. A.....	do.....	Mar. 9, 1905	Mar. 21, 1905	\$140 per month.
Carrigg, Mike.....	do.....	Mar. 7, 1905	Mar. 22, 1905	Do.
Roberge, Arthur L.....	do.....	Mar. 8, 1905	Mar. 14, 1905	Do.
Shull, E. H.....	do.....	Mar. 7, 1905	Mar. 22, 1905	Do.
Maher, Pet. F.....	Locomotive engineman.....	Mar. 10, 1905	Mar. 14, 1905	\$145 per month.
Showers, Ira M.....	do.....	Mar. 6, 1905	Mar. 7, 1905	Do.

For service on the Isthmus of Panama—Continued.

ENGINEERING DEPARTMENT—Continued.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.
Barnett, Edward	Trainman	Mar. 7, 1905	Mar. 15, 1905	\$90 per month.
Claypool, W.	do	Mar. 2, 1905	Mar. 21, 1905	\$75 per month.
Shedden, Howard F.	do	Mar. 10, 1905	Mar. 14, 1905	\$90 per month.
Kane, John H.	Switch engineman	do	Mar. 22, 1905	\$115 per month.
Dennis, L. R.	Switchman	Mar. 9, 1905	do	\$100 per month.
Kimmett, W. L.	do	Mar. 2, 1905	Mar. 21, 1905	Do.
Bryan, T. A.	Locomotive machinist	Mar. 7, 1905	Mar. 14, 1905	45 cents per hour.
Conner, E. B.	do	Feb. 28, 1905	do	Do.
Hart, James L.	do	Mar. 10, 1905	Mar. 21, 1905	Do.
Jepsen, P. C.	do	Mar. 1, 1905	Mar. 15, 1905	Do.
Kirk, Geo. F.	do	Mar. 7, 1905	Mar. 21, 1905	Do.
McCulloch, Albert P.	do	Feb. 28, 1905	Mar. 7, 1905	Do.
McGuire, Jno. F.	do	Mar. 11, 1905	Mar. 22, 1905	Do.
Nichols, James E.	do	Mar. 2, 1905	Mar. 14, 1905	Do.
Prata, Louis	do	Mar. 11, 1905	Mar. 21, 1905	Do.
Schweitzer, Jacob	do	Mar. 7, 1905	Mar. 14, 1905	Do.
Seawell, Jos. M.	do	Feb. 28, 1905	Mar. 7, 1905	Do.
Talbot, Sidney F.	do	Mar. 7, 1905	Mar. 21, 1905	Do.
Wilson, Scott J.	do	Mar. 1, 1905	Mar. 7, 1905	Do.
Edholm, Karl	Carpenter	Feb. 28, 1905	Mar. 14, 1905	\$100 per month.
Herring, G. W.	do	Mar. 7, 1905	Mar. 22, 1905	Do.
Lighthall, M. F.	do	Mar. 9, 1905	Mar. 21, 1905	Do.
Morris, E. A.	do	Mar. 8, 1905	Mar. 15, 1905	Do.
Rickard, H. S.	do	do	do	\$83.33 per month.
Taylor, John	do	Feb. 28, 1905	Mar. 7, 1905	\$100 per month.
Turner, E. K.	do	Mar. 9, 1905	Mar. 21, 1905	\$83.33 per month.
Turner, Wm. C.	do	do	do	\$100 per month.
Benninger, S. A.	Steam and air drill workman.	Mar. 7, 1905	Mar. 14, 1905	\$83.33 per month.
Harris, J. A.	Steam and air drill foreman.	Mar. 2, 1905	Mar. 8, 1905	\$125 per month.
Rogers, John J.	Steam and air drill workman.	Mar. 7, 1905	Mar. 18, 1905	\$83.33 per month.
Wallace, L. A.	do	Mar. 9, 1905	Mar. 21, 1905	Do.
Phillips, J. H.	Steam-shovel fireman	Feb. 27, 1905	Mar. 15, 1905	\$75 per month.
Turnbull, John	do	Mar. 2, 1905	Mar. 11, 1905	Do.
Waltman, Wm. D.	Miner	Mar. 8, 1905	Mar. 21, 1905	\$150 per month.
Byers, David A.	Pile-driver gang foreman	Mar. 7, 1905	Mar. 15, 1905	\$125 per month.
Coligan, John H.	do	do	Mar. 14, 1905	Do.
Graham, Saml. J.	Blacksmith	do	Mar. 15, 1905	45 cents per hour.
Cope, J. H.	do	Mar. 9, 1905	Mar. 21, 1905	Do.
Clendenning, W. H.	do	do	do	Do.
Crupper, Clayton	do	Mar. 2, 1905	Mar. 14, 1905	Do.
Elliott, Wesley	do	Mar. 9, 1905	Mar. 22, 1905	Do.
Haven, Fred. B.	do	Feb. 28, 1905	Mar. 15, 1905	Do.
Kirwin, Timothy	do	Mar. 2, 1905	Mar. 14, 1905	Do.
Lien, J. C.	do	Mar. 9, 1905	Mar. 21, 1905	Do.
Smith, Samuel	do	Mar. 2, 1905	Mar. 7, 1905	Do.
Taylor, Wm. A.	do	Mar. 9, 1905	Mar. 21, 1905	Do.
Tennis, O. J.	do	Mar. 2, 1905	Mar. 14, 1905	Do.
Fogerty, John E.	Molder	do	do	Do.
La Haye, Sol. J.	do	Mar. 10, 1905	Mar. 21, 1905	Do.
Dary, Joseph H.	Pattern maker	Mar. 1, 1905	Mar. 7, 1905	Do.
Jackson, Chas. A.	do	Mar. 10, 1905	Mar. 14, 1905	Do.
Borg, Hemke	Pipe fitter	Feb. 28, 1905	Mar. 7, 1905	Do.
Cornish, Frank L.	do	Mar. 10, 1905	Mar. 21, 1905	Do.
Davis, Edward H.	do	do	do	Do.
Howard, H. M.	do	Mar. 11, 1905	do	Do.
McCaffrey, Jas. E.	do	Mar. 1, 1905	do	Do.
Mongeon, A. J., Jr.	do	do	Mar. 7, 1905	Do.
Morgan, F. C.	do	Mar. 10, 1905	Mar. 21, 1905	Do.
Phillips, Wm. C.	do	Mar. 11, 1905	do	Do.
Shearer, Robt. R.	do	Mar. 2, 1905	do	Do.
Walker, Francis F.	do	do	Mar. 14, 1905	Do.
Ward, Fred. F.	do	Mar. 10, 1905	Mar. 21, 1905	Do.
Kapple, Geo. D.	Boilermaker	Feb. 28, 1905	Mar. 14, 1905	Do.
Muchlinski, Florian	do	Mar. 7, 1905	Mar. 15, 1905	Do.
Wardell, Henry R.	do	Mar. 9, 1905	Mar. 21, 1905	Do.
Billings, Henry E.	Foreman	do	Mar. 28, 1905	\$100 per month.

The recommendations of Mr. George C. Schafer, disbursing officer, Canal Zone, for the promotion of E. Lacroisade to \$125 per month, A. P. De Veyriere to \$125 per month, and J. Page to \$125 per month were approved.

The recommendations of the chief engineer contained in his letter of February 21, 1905, for the promotion of Mr. Patrick Galvin, superintendent of excavating department, to \$250 per month was approved, as was also the promotion of Mr. S. W. Settoon, camp supervisor, to \$175 per month. The recommendations of the chief engineer for an increase of his forces as follows were approved:

Office of the division engineer.—1 chief clerk, at \$175 per month; 1 stenographer, at \$125 per month; 3 clerks, at \$100 each per month.

Excavating department.—1 supervisor, at \$175 per month; 3 general foremen, at \$150 each per month; 1 chief clerk, at \$125 per month; 2 clerks, at \$100 each per month; 1 timekeeper, at \$100 per month; 1 assistant timekeeper, at \$75 per month; 20 complete steam-shovel crews, composed of 1 engineer, at \$190 per month, 1 cranesman, at \$165 per month, 1 fireman, at \$75 per month; 1 pitman, at \$75 per month.

Mining department.—1 superintendent, at \$250 per month; 2 general foremen, at \$150 per month each; 1 foreman, at \$125 per month, 1 clerk, at \$125 per month.

Track department.—1 superintendent of tracks to take the place of Mr. Cummins, who has left for the States, at \$250 per month; 4 track supervisors, at \$175 per month each; 6 general foremen, at \$150 per month each; 6 foremen, at \$125 per month each; 12 foremen, at \$100 per month each; 12 foremen, at \$83.33 per month each; 1 chief clerk, at \$125 per month; 1 clerk, at \$100 per month; 1 timekeeper, at \$100 per month; 1 timekeeper, at \$75 per month.

Transportation department.—1 superintendent, at \$250 per month; 2 trainmasters, at \$200 per month each; 3 general yard foremen, at \$175 per month each; 7 yard masters, at \$150 per month each; 7 yard masters, at \$125 per month each; 8 work-train conductors, at \$140 per month each; 10 work-train conductors, at \$120 per month each; 25 trainmen, at \$83.33 per month each; 25 trainmen, at \$75 per month each; 25 trainmen, at \$60 per month each; 20 locomotive enginemen, at \$145 per month each; 20 locomotive enginemen, at \$125 per month each; 20 switch enginemen, at \$115 per month each; 18 switch enginemen, at \$100 per month each; 75 firemen, at \$75 per month each; 1 chief clerk, at \$125 per month; 1 stenographer at \$100 per month; 1 timekeeper, at \$100 per month.

Dumps.—1 superintendent, at \$250 per month; 4 supervisors, at \$175 per month each; 8 general foremen, at \$150 per month each; 25 foremen, at \$100 per month each; 1 clerk, at \$100 per month; 1 timekeeper, at \$100 per month; 2 assistant timekeepers, at \$50 per month each.

Camp and building department.—1 general foreman, at \$150 per month; 1 chief clerk, at \$125 per month; 1 clerk, at \$100 per month; 1 clerk, at \$83.33 per month; 1 foreman, at \$100 per month; 1 carpenter foreman, \$125 per month.

Water-service department.—6 foremen, at \$100 per month each; 8 pipe-fitters, at 45 cents gold per hour each; 2 plumbers, at 45 cents gold per hour each.

On motion it was directed that the men required be procured and sent to the Isthmus at as early a date as practicable.

The chairman laid before the meeting a communication from the purchasing and shipping agent giving the names of certain surety and bonding companies qualified to do business in the District of Columbia, and recommending that the same be formally accepted by the Commission.

On motion of Mr. Grunsky it was resolved that the list be approved, but that others may be added from time to time as occasion requires. The list is as follows:

American Surety Company of New York, New York, N. Y.
Fidelity and Deposit Company of Maryland, Baltimore, Md.
American Bonding Company, Baltimore, Md.
The City Trust Safe Deposit and Surety Company, Philadelphia, Pa.
The Fidelity and Casualty Company, New York, N. Y.
The U. S. Fidelity and Guaranty Company, Baltimore, Md.
The Mercantile Trust Company, Pittsburg, Pa.
National Surety Company, New York, N. Y.
The Union Trust Company, Pittsburg, Pa.
The Aetna Indemnity Company, Hartford, Conn.
Pacific Surety Company, San Francisco, Cal.

Citizens' Trust and Guaranty Company, Parkersburg, W. Va.
 The Bankers' Surety Company, Cleveland, Ohio.
 The Empire State Surety Company, New York, N. Y.
 The Title Guaranty and Trust Company, Scranton, Pa.
 Federal Union Surety Company, Indianapolis, Ind.
 Industrial Trust, Title and Savings Company, Philadelphia, Pa.

The recommendation of the treasurer for the promotion of Miss Anna Root, accountant clerk in his office, to \$75 per month, on account of special aptitude for the work in hand, was referred to the chairman, with authority to act.

The chairman read a communication from the purchasing and shipping agent, dated March 10, 1905, asking that authority be given the assistant purchasing agents at New York, New Orleans, and San Francisco until June 30, 1905, to insert in the newspapers advertisements to be designated by the secretary, with the approval of the Commission.

On motion of Mr. Burr the matter was referred to the executive committee, with power to act.

The question as to whether bids should be opened and awards made by the assistant purchasing agents was also referred to the executive committee, with power to act.

The chairman presented a report from Mr. Parsons, chairman of the executive committee, recommending the appointments and promotions as requested by the chief engineer in his letter of February 21, 1905, as follows:

Name.	From		To	
	Position.	Rate of pay.	Position.	Rate of pay.
<i>Office of mechanical engineer.</i>				
Drake, R. L.....	Draftsman.....	\$83.33 per month..	Draftsman.....	\$100 per month.
Turley, H. C.....	Stenographer.....	\$100 per month..	Stenographer.....	\$125 per month.
<i>Bas Matalchin shops.</i>				
Corbin, Fred.....	Blacksmith shop foreman.	45 cents per hour.	Blacksmith shop foreman.	\$150 per month.
Davis, B.....	Machine shop foreman.	do	Machine shop foreman.	Do.
Fornander, J. A.....	do	do	do	Do.
Halleck, H. G.....	Yard foreman	\$83.33 per month..	Yard foreman	\$125 per month.
Irvin, Albert.....	Chief clerk	\$125 per month..	Chief clerk	\$150 per month.
Strand, Louis.....	Planing mill foreman.	\$100 per month..	Planing mill foreman.	\$125 per month.
<i>Empire shops.</i>				
Lorentz, Upton.....	Master mechanic...	\$150 per month..	Master mechanic...	\$175 per month.
Shoecraft, E. G.....	Clerk	\$83.33 per month..	Clerk	\$100 per month.
<i>Cristoval shops.</i>				
Harrington, E. C.....	General foreman...	\$150 per month..	Master mechanic...	\$175 per month.
Taylor, J. O.....	Clerk	\$83.33 per month..	Clerk	\$100 per month.

The additional force requested by the chief engineer in the same letter, which was also reported upon favorably, is as follows:

	Per month.
1 assistant mechanical engineer.....	\$250. 00
1 division master mechanic	200. 00
2 general foremen	175. 00
1 mechanical accountant.....	150. 00
1 chief mechanical draftsman	175. 00

	Per month.
2 mechanical draftsmen	\$150.00
2 mechanical draftsmen	125.00
2 mechanical draftsmen	100.00
4 machine shop foremen	150.00
3 boiler shop foremen	150.00
1 foundry foreman	150.00
3 car-shop foremen	150.00
3 yard foremen	150.00
8 mechanical gang foremen	125.00
1 first-class patternmaker and foreman	150.00
3 patternmakers	125.00
12 mechanical graduates (as soon as possible)	83.33
12 mechanical graduates (about July 1, 1905)	83.33

Mr. Harrod, chairman of the committee on engineering plans, presented the following report:

The committee on engineering plans approves the partial double-tracking of the Panama Railroad as recommended in the letter of the chief engineer of February 17, 1905, and the purchase of the necessary material therefor, and recommends that the chairman be directed to take the necessary steps with the Panama Railroad Company and otherwise to secure its accomplishment.

On motion the report was accepted and adopted.

Mr. Harrod, chairman of the committee on engineering plans, also presented the following:

The committee on engineering plans recommends the prompt purchase by public advertisement of the plant called for by the chief engineer in his letter of February 28, 1905, viz: Two 60-ton wrecking cranes, unless, as is now under consideration by a committee of the Panama Railroad Company, they are provided by that company; one 10-ton locomotive crane; one 20-ton locomotive crane; two 15-horsepower gasoline air compressors.

The committee further recommends that, in accordance with the suggestion of the chief engineer, the purchasing agent may receive the assistance of expert advice, from time to time, upon the approval of the chairman, in regard to the comparative efficiency of the various plants to be purchased.

The report was adopted.

Referring to the recently opened bids for rock-crushing plants, Mr. Harrod moved that the purchasing and shipping agent be authorized to secure expert examination of the several rock crushers and drills offered and report which is the lowest bid conforming to the specifications and offering a strong, durable, and efficient machine, proved to be such by actual use in contract operations.

At 1 o'clock p. m. the Commission took a recess.

At 2.30 p. m. the Commission reassembled and continued in session, considering the report made by Dr. C. A. L. Reed to the Secretary of War, until 6 o'clock p. m., when it adjourned subject to the call of the chairman.

EIGHTY-SIXTH MEETING.

EVENING STAR BUILDING,
Washington, D. C., March 15, 1905.

The Commission met at the call of the chairman at 11 o'clock a. m.

Present: Chairman Walker, Messrs. Burr, Harrod, and Grunsky.

Absent: Governor Davis, on duty on the Isthmus of Panama, and Mr. Parsons.

On motion the reading of the minutes of the eighty-fifth meeting was dispensed with.

The chairman laid before the meeting a letter dated March 10, addressed to the President, from W. L. Saunders, president Ingersoll-Sergeant Drill Company, New York, referred by the Secretary of War for report, respecting bids recently opened for rock-drilling machinery, and asking that no award be made until after inspection of their works by some competent person.

The chairman stated that he would return the communication to the Secretary of War with report, which would embody the resolution adopted at the meeting on the 14th instant, respecting bids for rock-drilling machinery.

At 11.20 a recess was taken.

The Commission reassembled at 2.30 o'clock.

The chairman laid before the meeting the following list of promotions at the Washington office of the Commission since March 1, 1905, which, on motion, was approved:

Ray F. Smith, appointment clerk, \$1,400 per year.
 E. B. DeGraw, confidential clerk to Secretary, \$1,400 per year.
 C. S. Pfug, file clerk, \$1,400 per year.
 Jessie A. Griswold, stenographer and typewriter, \$100 per month.
 Maude M. Webster, stenographer and typewriter, \$100 per month.
 Florence M. Hazard, stenographer and typewriter, \$75 per month.
 Zaida Nicholson, stenographer and typewriter, \$75 per month.
 Georgia D. Herring, stenographer and typewriter, \$75 per month.
 Maude R. Durfee, clerk and typewriter, \$75 per month.
 Sarah E. Zimmerman, clerk and typewriter, \$75.
 Louise B. McKeldon, clerk and typewriter, \$75 per month.
 Emma C. Davidson, clerk and typewriter, \$75 per month.
 Madeleine Quackenbush, clerk and typewriter, \$75 per month.
 Adelaide Bernhardt, clerk and typewriter, \$75 per month.
 Marie M. Robey, clerk and typewriter, \$75 per month.
 Eliza A. Reynolds, time clerk, \$75 per month.
 Anna M. Root, accountant clerk, \$75 per month.

On motion of Mr. Burr, the matter of increase of salary for the assistant secretary from \$200 to \$250 per month was referred to the chairman, with power to act.

The recommendation of the chief clerk for the promotion of Miss Wells from \$75 to \$100 per month was also referred to the chairman, with power to act.

The report of the committee on engineering plans that the plans and specifications for the waterworks for the city of Colon, as recommended by the chief engineer in his communication of January 11, 1905, with report of Mr. C. E. Davis, engineer in charge of waterworks and sewers, and accompanying blueprints, was adopted, with the suggestion that the concrete sides of the water tower below the tank and between the columns be omitted and that the construction of the work be authorized.

Mr. Harrod moved that this Commission approve and recommend a plan for a sea-level canal, with a bottom width of 150 feet and a minimum depth of water of 25 feet, with twin tidal locks at Miraflores, whose usable dimensions shall be 1,000 feet long and 100 feet wide, at a total estimated cost of \$230,500,000. Such estimate includes in it allowance for administration, engineering sanitation, and contingencies, amounting to \$38,450,000, but without allowance for interest during construction, expense of Zone Government, collateral costs, water supply, sewers, or paving of Panama or Colon.

Mr. Grunsky moved as an amendment that the report of the committee on engineering bearing date of February 14, 1905, relating to conduct

of engineering work on the Isthmus and to the type of canal to be constructed be referred to the committee on engineering plans for its consideration and comment.

After discussion, the amendment as proposed by Mr. Grunsky was adopted.

On motion, it was resolved that 1,000 copies of the report of the engineering committee be printed in pamphlet form.

The project of the chief engineer, as outlined in his letter of February 25, 1905, for an entrance to the canal at Cristobal, was ordered referred to the committee on engineering plans.

The report of the committee on engineering plans, with the provisional estimate made by the chief engineer as to the cost of constructing the road to the Savanas, submitted by Governor Davis in his letter of February 14, 1905, with accompanying blueprints, was ordered referred to the committee on engineering plans.

The question of paving the streets of Panama with asphalt, instead of brick, in case this paving is done by the United States, was referred to the chairman, with power to call for expert opinion as to the serviceability of asphalt under the climatic conditions of the Isthmus of Panama. It was the sense of the Commission that the chairman should communicate with Mr. Clifford Richardson, of New York, and Mr. A. W. Dow, of Washington, in reference to this matter.

Regarding the request of Major Gallagher, U. S. Army, purchasing and shipping agent, that authority be given to employ a man familiar with railway supplies, as suggested by the chief engineer in his letter of February 27, 1905, it was directed that the purchasing and shipping agent consult with the chairman in reference to the making of a suitable appointment.

At 5.30 o'clock p. m. the Commission adjourned, subject to the call of the chairman.

EIGHTY-SEVENTH MEETING.

EVENING STAR BUILDING,
Washington, D. C., March 16, 1905.

The Commission met at the call of the chairman at 10.30 o'clock a. m.

Present: Chairman Walker, Messrs. Burr, Harrod, and Grunsky.

Absent: Governor Davis, on duty on the Isthmus of Panama, and Mr. Parsons.

The minutes of the meeting of the 14th instant were read and approved.

The committee on sanitation reported that the matter of raising the salaries of trained nurses, referred to in two communications from the chief sanitary officer, the last of which bears date of February 21, 1905, and also discussed in a memorandum filed at the request of the Commission by Miss Eugenie Hibbard, the head nurse of Ancon Hospital, had received consideration, and the committee recommends the adoption of the resolutions below noted, carrying out the recommendation of the chief sanitary officer. The committee further suggests that the additional recommendations of Miss Hibbard relating to pay of nurses and to the admission of student nurses to a post-graduate course, with an examination at the termination of the course and the issuance of certificates of satisfactory service, be submitted to the chief sanitary officer for comment.

On this matter Miss Hibbard states that after careful inquiry she feels herself "in a position to state that such a course would draw a sufficient number of nurses to keep the nursing department supplied." She recommends that the number of such post-graduate students should be fixed at 25 per cent of the nurses required on the Isthmus.

The resolutions which the committee favors are the following:

Resolved, That the salary of the chief nurse at Ancon Hospital be fixed at \$125 per month from and after April 1, 1905.

Resolved, That the salaries of trained nurses serving on the Isthmus be fixed in two grades, namely, \$50 per month and \$60 per month, and that nurses be advanced from the lower to the higher grade on the recommendation of the chief sanitary officer. Both of these resolutions were adopted.

The chairman laid before the meeting the recommendation of the purchasing and shipping agent that authority be given him to employ in his office a shipping inspector, at a salary of \$1,800 per annum, to investigate the progress of shipments of material and to see that shipping instructions are carried out.

On motion, the appointment of a shipping inspector, at \$1,800 per annum, at the Washington office, was authorized, to be appointed by the Commission.

The recommendations of the purchasing and shipping agent that he be authorized to employ an expert in the erection of earth spreaders, at a salary of \$5 per day, with necessary expenses, was laid before the Commission, and on motion it was resolved that the chairman be authorized to cable the chief engineer, asking whether he desired a mechanical expert to proceed to the Isthmus of Panama to superintend the erection of the Jordan earth spreaders.

The communication from the purchasing and shipping agent, dated March 14, 1905, respecting authority to enter into agreements with inspection bureaus was taken under consideration, and it was the sense of the Commission that the present arrangements for inspection should be continued until the arrival of the chief engineer in Washington, when the purchasing and shipping agent should consult with him regarding a permanent working scheme of inspection. Pending the arrival of the chief engineer, in case of emergency the purchasing and shipping agent is to consult with the chairman.

The chairman read a letter from Dr. L. W. Spratling, superintendent of Colon Hospital, respecting the pay of navy officers in the employ of the Commission, and suggesting a modification of the resolution under which their pay is at present fixed.

The matter was referred to the executive committee.

The chairman read for information a letter from the chief engineer, dated February 28, 1905, regarding additional steam shovels, and stated that the Commission had taken prompt action toward securing proposals for 12 steam shovels, 6 of the 70-ton type and 6 of the 95-ton type, with an option for 6 more of each size, and had so directed the purchasing agent.

The chairman read a letter from the chief engineer, dated February 28, 1905, regarding the transportation of laborers to the Isthmus, and the following resolution was adopted:

Resolved, That the chairman be authorized to write to the chief engineer and the chief disbursing officer on the Isthmus that the passage money for laborers who have no contracts, from nearby points, may be paid by the disbursing officer upon proper certificate from the chief engineer.

The chairman read a letter from the chief engineer, dated February 27, 1905, calling attention to the action of the Commission of January 31, 1905, authorizing the erection of a hospital of 100 beds, to be located at Miraflores, for the use of lepers, insane, and incurables, and suggesting that hospitals for contagious diseases be located off the line of travel.

On motion, the communication was referred to the chief sanitary officer for consideration and report after conference with the chief engineer, and the chairman was instructed to write the chief sanitary officer of the action taken.

A letter from the chief engineer was read, dated February 27, 1905, respecting hotels and eating houses along the canal strip; was ordered referred to the chairman, that copies might be sent to Mr. E. C. Tobey, chief of the material and supplies department; and it was further directed that Mr. Tobey be instructed to evolve some plans for the boarding and lodging of the working forces of the Commission on the Isthmus which will meet the approval of the resident member of the Commission and the chief engineer.

The recommendation of the chief engineer that an expert rubber-stamp manufacturer be engaged and sent to the Isthmus to report to him, was referred to the purchasing and shipping agent for investigation and report.

The chairman read a letter from the chief engineer, dated February 2, 1905, recommending that authority be given him to appoint one of his staff as acting chief engineer during his absence from the Canal Zone.

On motion, it was

Resolved, That the chief engineer be authorized to make such appointment of acting chief engineer during his next trip from the Isthmus to the United States.

The recommendation of the disbursing officer of the Canal Zone of February 24, 1905, looking to the appointment of an additional cashier in his office, was approved and ordered referred to the chairman, with power to make the appointment and fix the salary.

The chairman read for information a letter from the chief engineer, dated February 23, 1905, in which he emphasized the necessity of uniformity in purchases of equipment for the Panama Railroad and that purchased for the Commission, and stated that the matter had already been acted upon.

A letter from the chief of material and supplies department, dated February 23, 1905, referring to the transfer of the railroad ice plant to the commissary, and to the establishment of a duplicate plant for the manufacture of ice, distillation of water, and cold storage space, was read for information.

A communication from the purchasing and shipping agent recommending the appointment of Mr. W. F. Sands as assistant purchasing and shipping agent at San Francisco, Cal., at a salary of \$2,000 per year, was read and action withheld for the present, the papers having been requested by the War Department.

A letter from Governor Davis, dated February 27, 1905, relating to leaves of absence for employees, was read, and, after discussion, was referred to the executive committee for consideration and report.

The chairman read a communication from Governor Davis, dated February 27, 1905, regarding the authority asked for by the chief engineer to construct six buildings to be used as quarters of employees,

similar to those approved by the Commission for erection at Culebra, and stated that the matter had already been acted upon.

The chairman read for information a communication from Governor Davis, dated February 27, 1905, transmitting recommendation of the chief sanitary officer that mosquito bars be added to list of furnishings allowed employees of the Commission, together with six indorsements.

The Commission favors the furnishing of a mosquito bar with the furniture to which employees are entitled, subsequent bars to be at the expense of the employees.

At 1.10 o'clock p. m. the Commission took a recess until 3.20 o'clock p. m., when they reassembled.

The chairman called attention to a set of Congressional reports, bills, etc., concerning the canal, compiled by Mr. Gorman, and offered for sale to the Commission.

On motion, the matter was referred to a committee, consisting of Messrs. Grunsky and Harrod, for consideration and report.

A communication from the purchasing and shipping agent was read regarding rock-crushing plants, and calling attention to the fact that Motley, Green & Co. were lowest bidders.

This matter has already been acted on, and the employment of an expert has already been authorized.

At 4 o'clock p. m. the meeting adjourned, subject to the call of the chairman.

EIGHTY-EIGHTH MEETING.

BOARD ROOM, PANAMA RAILROAD COMPANY,
New York, March 22, 1905.

The Commission met at 10 a. m., at the call of the chairman.

Present: Chairman Walker, Messrs. Burr, Parsons, and Grunsky.

Absent: General Davis, on duty on the Isthmus, and Mr. Harrod.

Mr. Grunsky was appointed to act as secretary pro tempore.

The minutes of the meetings of March 15 and 16 were read and approved.

Upon suggestion of the chairman it was determined that in case it be decided to recommend to Congress that a sea-level canal with a tidal lock 1,000 feet long and 100 feet wide be constructed the depth of the canal shall be fixed at 40 feet.

The chairman laid before the meeting a report from Mr. Benjamin B. Lawrence, mining engineer, relative to the bids received by the Commission for rock drills and for a rock-crushing plant, in which he advises against the purchase of any type of drill other than those of standard manufacturers who have been long enough in the business to demonstrate the value of their drills, not as measured by their first cost, but by the work they will do and the cost of keeping them in repair.

Mr. Parsons moved that in view of the recommendations of Mr. Lawrence and the importance of sending to the Isthmus only those appliances which have had a thorough test and experience the purchasing and shipping agent be directed to reject all bids for the 25 rock drills and to ask for proposals from the Rand Drill Company and the Ingersoll-Sergeant Drill Company for prices on each size of drill manufactured by them from 3½ to 4½ inches, together with proposals

from each of these companies to repair and put into serviceable condition the French drills now on the Isthmus.

A letter from Motley, Green & Co., dated March 20, 1905, relating to their proposal to furnish a rock-crushing plant, was read for information.

Again referring to the the recommendations of Mr. Lawrence, Mr. Parsons further moved that in the matter of the purchase of a rock-crushing plant the purchasing and shipping agent be authorized to make the award to Manning, Maxwell & Moore for a plant with the Gates type of rock crusher, such proposal being the most advantageous to the United States Government. The resolution was adopted.

A letter from Governor Davis, dated March 6, 1905, was read, recommending a scheme for the reorganization of the office of the chief sanitary officer, which scheme bears the approval of the chief sanitary officer, and is as follows:

Chief sanitary officer, \$7,500 per annum.

Assistant chief sanitary officer, \$7,000 per annum.

Executive officer (to be detailed from the medical staff by the governor of the Canal Zone, on the recommendation of the chief sanitary officer).

Chief clerk, \$2,000 per annum.

General time clerk, \$1,500 per annum.

3 stenographers, each \$1,500 per annum.

2 record and file clerks, each, \$1,500 per annum.

1 property clerk, \$1,500 per annum.

2 messengers, each, \$800 per annum.

On this matter the committee on sanitation reported that it favored this organization, which was a consolidation of the two offices of chief sanitary officer and of director of hospitals, but that as these separate offices were provided for under the laws of the Canal Zone, which can no longer be amended by the Commission, further action in this matter be postponed for the present.

A letter from Chief Engineer Wallace, dated March 6, 1905, relating to a modification of a resolution passed at the sixty-fourth meeting of the Commission, was read and his recommendation carried out by the adoption of the following resolution in lieu of the former resolutions relating to this matter:

Resolved, That the chief engineer is hereby authorized to employ for work on the Isthmus, at the rate of 45 cents per hour, in gold, such first-class experienced locomotive enginemen, switchmen, work-train conductors, blacksmiths, boiler makers, machinists, coppersmiths, molders, pattern makers, and other labor of this character as may be required from time to time for the efficient and economical prosecution of the work under his jurisdiction. The chief engineer is also authorized to employ such train men, brakemen, locomotive firemen, helpers, and handy men in connection herewith, at the following rates of pay in gold, as the necessities of the work may require: Third grade, 35 cents per hour, gold; second grade, 30 cents per hour, gold; first grade, 25 cents per hour, gold. These rates of pay to remain in force until modified by the action of this Commission.

The letter of the Secretary of War, dated March 20, 1905, in which he advises reconsideration of the action of the Commission, to purchase a second lot of 2,500 tons of rails by advertisement for proposals, and advises their purchase under the contract for rail purchase held by the Panama Railroad Company, was laid before the Commission, and it was resolved that the resolution authorizing advertisement be rescinded, and that the purchase of these 2,500 tons of rails and the necessary rail fastenings be ordered through the Panama Railroad Company, provided that they can be obtained at the price of the preceding recent purchase of 2,500 tons.

The letter of the chief engineer, dated March 7, 1905, relating to the purchase of a seagoing tug, was read, received favorable consideration, and was referred to the executive committee, with authority to employ expert advice.

Letter from chief engineer, dated March 6, 1905, recommending that in purchasing rails lengths in excess of 30 feet be favored, was read for information, and referred to the chairman for suitable action.

A letter from chief engineer, dated March 2, was read, recommending the purchase of a light motor car of the type known as No. 16, motor car, manufactured by the Sheffield Car Company, of Three Rivers, Mich. This purchase was authorized.

The enlargement of the machine shops at Cristobal, as recommended by the chief engineer in two letters, bearing date of March 7, 1905, involving construction of new tracks, readjustment of the old tracks, and construction of new buildings, preliminarily estimated to cost about \$65,000, was authorized.

The chairman read for information a letter from Mr. S. M. Felton, dated March 11, 1905, addressed to the Secretary of War, relating to the proposed new equipment of the Panama Railroad Company.

A letter from Miss Eugenie Hibbard, chief nurse at Ancon Hospital, to the secretary of the Commission, relating to the purchase of a piano, was read for information, Miss Hibbard having asked that a piano selected by her and made specially for use in the Tropics be purchased at a cost of \$265 for use at the Ancon Hospital. The purchase of this piano was, on motion of Mr. Parsons, authorized.

In the matter of the erection of barracks at Ancon for 200 marines, the Commission, at the request of the Secretary of War, approved the general plan as submitted, and directed the chairman to take the necessary steps to obtain a suitable location and to secure the erection of the structures.

The attention of the Commission was called to requisitions Nos. 366 A and 359 A for lumber, to be held in stock on the Isthmus. The first of these requisitions is for about 12,000,000 feet of rough lumber; the second is for about 14,000,000 feet of dressed lumber. Both of these requisitions are for either yellow pine, Oregon fir, or redwood.

The Commission authorized the use of the designation Douglas fir in lieu of Oregon fir, and as redwood is not in the same class with yellow pine nor with Douglas fir, it directed that specifications should be prepared and advertisement should be made for long-leaf yellow pine or Douglas fir to fill the requisition for rough lumber. In the matter of requisition 359 A for dressed lumber, definite action was postponed, as it may be desirable to segregate the requisition into two classes, according to use to be made of the material.

The chairman presented a report from the Auditor relating to the salaries now paid to Dr. L. W. Spratling and other naval men assigned to duty with the Commission and recommending that in each such case a specific sum be named in lieu of the general regulation providing for a percentage increase of salary. The chairman stated that the matter had received attention by the executive committee, to which had been referred a letter from Doctor Spratling, dated March 14, 1905, on this subject. The chairman recommended that the salaries of the officers immediately affected be fixed as follows: Dr. L. W. Spratling at \$5,500 per year, Dr. H. C. Curl at \$3,600 per year, Mr. George G. Shafer at \$4,000 per year.

The Commission concurred in this recommendation fixing the salaries of these officers at the amounts named, to begin in each case on April 1, 1905.

In the matter of purchases to be made under bids called for by circular proposals, the Commission approved of advertising substantially as recommended by the purchasing and shipping agent, as follows:

Two insertions of each notice, of which the first should be made on the date of issuing the circular and the second sufficient time in advance of the opening to permit mail matter from the point where publication is made to reach the place where bids are to be opened.

The New York agency will advertise, unless otherwise directed, in two daily journals of New York and in one daily newspaper in each of the cities of Philadelphia, Baltimore, and Boston.

The New Orleans agency will advertise in a daily newspaper of New Orleans, in a daily newspaper of St. Louis, and in a daily newspaper of Chicago.

The San Francisco agency will advertise in two daily newspapers of San Francisco, in a daily newspaper of Seattle, Wash., and in a daily newspaper of Portland, Oreg.

Purchases under bids called for by circular proposals are to be made when the purchase is not large (aggregating less than \$1,000) and when quick delivery is required.

For further guidance of the purchasing agent, it was resolved that in the making of all large and important purchases bids should be called for by advertisement in newspapers throughout the country, thirty days' notice being given; and it was further resolved that purchases by oral agreement should only be resorted to—

(a) In an emergency, when the public exigencies require immediate delivery and there is no time to advertise in newspapers, by circulars, or posters.

(b) When it is impracticable to secure competition, as in the case of proprietary articles.

(c) When proposals have been invited and none received.

(d) When proposals are above the market price or otherwise unreasonable, as might happen in the case of collusion among bidders.

The promotion of the following-named employees of the auditor's office, made by the chairman, were confirmed to date, March 1, 1905, as follows: H. P. Merrill, clerk, \$1,600 to \$1,800; H. S. Newman, clerk, \$1,400 to \$1,600; F. B. Warwick, clerk, \$1,200 to \$1,400; W. E. Birgfield, clerk, \$1,200 to \$1,400; G. W. Brown, clerk, \$900 to \$1,200; H. H. Edwards, clerk, \$900 to \$1,200.

At 1.30 p. m. the Commission adjourned.

EIGHTY-NINTH MEETING.

EVENING STAR BUILDING,
Washington, D. C., March 28, 1905.

The Commission met at the call of the chairman at 10.45 o'clock a. m.

Present: Chairman Walker, Messrs. Parsons, Burr, Harrod, and Grunsky.

Absent: Governor Davis, on duty on the Isthmus of Panama.

The minutes of the eighty-eighth meeting were read and approved.

The chairman presented the following list of appointments made

since March 14, 1905, which, on motion, were approved, subject to the action of the Civil Service Commission:

For service at Washington, D. C.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.
Lowe, Edgar	Stenographer.....	Mar. 22, 1905	Mar. 22, 1905	\$900 per year.
Newburgh, Frederic ..	.....do	Mar. 20, 1905	Mar. 20, 1905	\$1,000 per year.

For service on the Isthmus of Panama.

EXECUTIVE DEPARTMENT.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.
Bernau, Saml. J.	Stenographer to chief of police.	Mar. 14, 1905	Mar. 28, 1905	\$1,200 per year.

HEALTH DEPARTMENT.

Dayton, Frank L.	Clerk	Mar. 16, 1905	Mar. 28, 1905	\$1,200 per year.
Frank, George	Sanitary foreman.....	Mar. 17, 1905	Mar. 22, 1905	\$900 per year.
Reich, Chester M.	Clerk	Mar. 16, 1905	Apr. 18, 1905	\$1,200 per year.

ENGINEERING DEPARTMENT.

Baker, J. A.	Steam-shovel engineer.	Mar. 23, 1905	Mar. 28, 1905	\$190 per calendar month and \$1 extra for each 1,000 cubic yards of excavated material loaded by shovel in his charge during one calendar month in excess of 25,000.
Brown, Geo. M. ....	.....do	Mar. 24, 1905	.....do	\$190 and extra.
Moore, Benj. F. ....	.....do .....	.....do .....	.....do	Do.
Anderson, B.	Clerk	Mar. 21, 1905	Mar. 28, 1905	\$1,200 per year.
Anderson, C. E. ....	.....do .....	.....do .....	.....do	\$1,500 per year.
Barrett, Nelson M. ....	.....do .....	.....do	Apr. 4, 1905	\$1,200 per year.
Benners, Albert P. ....	.....do .....	.....do	Mar. 28, 1905	\$1,500 per year.
Boydson, J. W. ....	.....do	Mar. 23, 1905	Apr. 4, 1905	\$1,200 per year.
Davison, Ferd D.	Chief clerk	Mar. 14, 1905	Mar. 21, 1905	\$2,100 per year.
Doty, F. W.	Clerk .....	.....do	Mar. 28, 1905	\$1,500 per year.
Frederickson, Carl. ....	.....do	Mar. 21, 1905	Apr. 4, 1905	Do.
Giles, Ira A. ....	.....do .....	.....do	Mar. 29, 1905	Do.
Hayes, Alvin J. ....	.....do .....	.....do	Mar. 28, 1905	\$1,200 per year.
Haywood, Harry A. ....	.....do	Mar. 22, 1905	.....do	\$1,000 per year.
Hooker, Jos. C. ....	.....do	Mar. 21, 1905	Apr. 5, 1905	\$1,500 per year.
Hostetter, H. O. ....	.....do	Mar. 22, 1905	Apr. 4, 1905	\$1,200 per year.
Hyde, William H. ....	.....do	Mar. 21, 1905	Mar. 29, 1905	\$1,000 per year.
Kennedy, Sidnie.	Chief of division, clerk, and stenographer.	Mar. 20, 1905	Mar. 29, 1905	\$1,800 per year.
Lamb, C. E.	Clerk	Mar. 24, 1905	Apr. 5, 1905	\$1,500 per year.
McAdam, G. M. ....	.....do	Mar. 21, 1905	Apr. 4, 1905	\$1,200 per year.
Nelson, Chas. W.	Stenographer.....	Mar. 14, 1905	Mar. 28, 1905	\$1,500 per year.
Paton, L. B.	Clerk	Mar. 21, 1905	.....do	\$1,000 per year.
Perry, Frank H.	Accountant	Mar. 23, 1905	.....do	\$1,500 per year.
Sargent, Chas. R.	Clerk .....	.....do	Apr. 5, 1905	\$1,000 per year.
Tucker, W. G. ....	.....do	Mar. 22, 1905	Mar. 28, 1905	\$1,500 per year.
Van Holland, H. ....	.....do	Mar. 21, 1905	Apr. 4, 1905	\$1,200 per year.
Ward, Frank X. ....	.....do .....	.....do .....	.....do	Do.
Williams, Jay E. ....	.....do .....	.....do	Apr. 5, 1905	Do.
Berry, E. W.	Draftsman.....	Mar. 25, 1905	Mar. 28, 1905	\$1,800 per year.
Hitt, Saml. M.	Architectural draftsman.	Mar. 23, 1905	.....do	Do.
Hannum, J. P.	Rodman	Mar. 20, 1905	.....do	\$75 per month.
McGuire, E. S. ....	.....do	Mar. 14, 1905	Mar. 21, 1905	Do.
Penick, E. P. ....	.....do	Mar. 21, 1905	Apr. 5, 1905	Do.
Farrish, J. R. ....	.....do	Mar. 14, 1905	Mar. 22, 1905	\$83.33 per month.
Riddle, Wm. C. ....	.....do .....	.....do	Mar. 28, 1905	\$75 per month.
Watters, H. B. ....	.....do .....	.....do	Mar. 22, 1905	Do.
Alexander, C. C.	Chain man	Mar. 24, 1905	Apr. 4, 1905	\$60 per month.
Burgess, E. W. ....	.....do	Mar. 25, 1905	Apr. 5, 1905	Do.
Greaves, Wm. L. ....	.....do	Mar. 14, 1905	Mar. 21, 1905	Do.

* Transferred to Washington office.

Van A.
Smith,
Malone
O'Neill
Fergus
Milton,
Rabb, I.
Ferris,
Hayes,
Hill, Jo
Lipsett,
Loeffler
Russell
Snyder
Braman
Hall, M

McCorm
Davis,
Gladfel
Miller,
Morris,
Self, Gr
Whitne
Bahel,
McDon
Clunan
Nelson,
Dobows
Gaines,
Ehrstun
Rodrigu
Smith, I
Warren
Jordan,
Rose, Ju
Stillwel
Westfal
Carriek
Miles, C
Dunlop,

Swineh
Swineh

Tommy,

The
chief
inclos
missa
motio

G. Delga
L. Simo
M. de la
C. Delga
M. A. N
J. A. Ca
Charles
H. J. Ca
S. Brow
P. Salab
E. Hugh
S. Mord
V. Vaug
J. Storey
J. De Le
A. Sincl
E. Parad
J. Wint
A. Zunig

For service on the Isthmus of Panama—Continued.

ENGINEERING DEPARTMENT—Continued.

Name.	Position.	Date of appointment.	Takes effect.	Rate of pay.
Van Atta, R. S.	Chain man	Mar. 25, 1905	Apr. 4, 1905	\$60 per month.
Smith, H. E.	Locomotive engineer	Mar. 17, 1905	Mar. 28, 1905	\$145 per month.
Malone, Frank	do	Mar. 20, 1905	do	\$115 per month.
O'Neill, C. A.	do	do	do	Do.
Ferguson, L. W.	Locomotive engineman	Mar. 17, 1905	Mar. 29, 1905	\$125 per month.
Milton, T. H.	do	do	do	Do.
Rabb, E. M.	do	Mar. 14, 1905	do	\$115 per month.
Ferris, M. L.	Carpenter	Mar. 20, 1905	Apr. 1, 1905	\$100 per month.
Hayes, J. P.	do	Mar. 25, 1905	Apr. 4, 1905	\$75 per month.
Hill, John A.	do	Mar. 14, 1905	Mar. 22, 1905	\$100 per month.
Lipsett, G. L.	do	Mar. 21, 1905	Apr. 4, 1905	Do.
Loeffler, G. L.	do	Mar. 22, 1905	Mar. 28, 1905	Do.
Russell, W. T.	do	Mar. 20, 1905	do	Do.
Snyder, J. A.	do	Mar. 25, 1905	Apr. 4, 1905	\$75 per month.
Braman, Chas. E.	Pile driver	do	do	\$100 per month.
Hall, M. D.	Bridge carpenter (pile-driving gang).	Mar. 16, 1905	Mar. 28, 1905	Do.
McCormick, P. C.	do	Mar. 14, 1905	do	Do.
Davis, Frank	Blacksmith	Mar. 20, 1905	Mar. 29, 1905	45 cents per hour.
Gladfelter, M. F.	do	Mar. 21, 1905	do	Do.
Miller, H. B.	do	do	Mar. 28, 1905	Do.
Morris, J. F.	do	do	Mar. 29, 1905	Do.
Self, Grafton	do	do	do	Do.
Whitney, A. E. J.	do	Mar. 16, 1905	do	Do.
Bahel, Wm.	Molder	do	Mar. 21, 1905	Do.
McDonald, C. J.	Pattern maker	Mar. 20, 1905	Mar. 28, 1905	Do.
Clunan, E. P.	Locomotive machinist	Mar. 21, 1905	Mar. 29, 1905	Do.
Nelson, John	do	do	do	Do.
Dobowski, L.	Boilermaker	Mar. 14, 1905	Mar. 21, 1905	Do.
Gaines, S. S.	Pipe fitter	do	Mar. 22, 1905	Do.
Ehrstman, F.	Train master	do	Mar. 28, 1905	\$200 per month.
Rodriguez, S. B.	Work-train conductor	Mar. 16, 1905	do	\$140 per month.
Smith, Frank T.	do	Mar. 20, 1905	do	\$120 per month.
Warren, E. L.	do	Mar. 16, 1905	Mar. 25, 1905	\$140 per month.
Jordan, J. E.	Yard master	Mar. 24, 1905	Apr. 4, 1905	\$125 per month.
Rose, James	do	Mar. 16, 1905	Mar. 21, 1905	Do.
Stillwell, L. M.	do	Mar. 24, 1905	Mar. 28, 1905	\$150 per month.
Westfall, W. C.	do	Mar. 20, 1905	do	\$125 per month.
Carrick, Bart N.	Track foreman	Mar. 16, 1905	Mar. 21, 1905	\$75 per month.
Miles, C. M.	do	Mar. 17, 1905	do	\$100 per month.
Dunlop, Andrew M.	Steam and air drill foreman	Mar. 14, 1905	Mar. 22, 1905	\$125 per month.
Swinehart, C. M.	do	Mar. 15, 1905	Mar. 29, 1905	Do.
Swinehart, J.	Steam and air drill workman	Mar. 16, 1905	do	\$83.33 per month.
Penny, H. H.	Supervisor of dumps	Mar. 21, 1905	Mar. 28, 1905	\$175 per month.

The chairman also presented a communication from Mr. E. C. Tobey, chief of department of material and supplies, dated March 7, 1905, inclosing appointments of the following men taken over from the commissary of the Panama Railroad Company on the 16th ultimo, and, on motion, the appointments were approved:

Name.	Position.	Rate of pay.
G. Delgado	Chief clerk	\$100 gold per month
L. Simons	Stenographer	\$30 gold per month.
M. de la Esprella	Clerk	\$62.50 gold per month.
C. Delgado	do	\$45 gold per month.
M. A. Nunes	Store-keeper	\$100 gold per month.
J. A. Campbell	Clerk	\$62.50 gold per month.
Charles Foulk	do	\$60 gold per month.
H. J. Cambridge	do	Do.
S. Brown	Foreman	\$45 gold per month.
P. Salabarría	Porter	\$35 gold per month.
E. Hughes	do	Do.
S. Mordecai	do	Do.
V. Vaughn	do	Do.
J. Storey	do	Do.
J. De Lenza	do	\$30 gold per month.
A. Sinclair	do	Do.
E. Parada	do	\$25 gold per month.
J. Wint	do	\$20 gold per month.
A. Zuniga	do	Do.

The recommendations of the chief of the department of material and supplies for the promotion of Capt. Paul Wuttke, from \$83.33 to \$100 per month; of Harry Leonard, from \$900 to \$1,400 per annum (effective April 1, 1905); of H. U. Murkland, to \$100 gold per month (effective March 1, 1905); of H. C. Collins, chief bookkeeper, from \$1,500 to \$1,800 per annum, and the appointment of Robert Dollander as machinist, at 35 cents gold per hour, in the department of material and supplies, were, on motion, approved.

The resignation of Walter Callahan, storekeeper, forwarded by Mr. Tobey, chief of department of material and supplies, under date of March 18, 1905, was accepted, to take effect March 7, 1905.

The reports of the chief engineer covering appointments, promotions, resignations, etc., for the weeks ending February 25, March 4, and March 11, 1905, were read and approved.

In the matter of the purchase of a second rock-crushing plant, the directions to the purchasing and shipping agent to advertise for proposals for the same were rescinded and the purchasing and shipping agent was directed to duplicate the purchase authorized under the proposals received for the first plant. He was also directed to ascertain the price at which additional No. 5 crushers could be obtained, including suitable installation, as a part of the second rock-crushing plant.

The recommendation of the chief engineer contained in his letter of February 27, 1905, that an expert in the manufacture of rubber stamps be engaged and ordered to report to him on the Isthmus, with the report of the purchasing and shipping agent thereon, was considered, and it was ordered referred back to the purchasing and shipping agent with instructions to secure information as to the plant required for the manufacture of rubber stamps, cost of the same, and to make report at an early date to the Commission.

Mr. Grunsky, of the committee on sanitation, presented the following report, which was received and approved by the Commission:

In the matter of the letter from the chief sanitary officer, dated December 21, 1904, and a letter from General Davis, dated December 24, 1904, transmitting the same, relative to the resolution of the Commission, in which the intention to establish almshouses and general free dispensaries in the Canal Zone is disclaimed, the committee on sanitation desires to state that these letters were held pending the return of the engineering committee from the Isthmus.

Action in the matter of establishing necessary emergency hospitals and dispensaries has meanwhile been taken; but the committee desires, in returning these letters to the Commission, to state that this resolution was not intended to prevent the necessary treatment of indigent sick, nor to restrict the medical staff in taking suitable measures to reduce malaria.

The committee has not sufficient data at hand to make any definite recommendations in this matter. Action must be preceded by definite recommendations of the health department. The chief sanitary officer interprets the resolution to prohibit the "free prescribing of quinine for all others except employees."

When a measure such as the giving of quinine to reduce malaria is regarded as necessary, and is recommended by the medical staff, the Commission should facilitate the carrying out of such measure, regardless of any such general requirements as contained in the resolution above referred to.

The judgment of this committee is decidedly in favor of permitting the administration of quinine to be left entirely to the discretion of the Commission's medical staff.

The chairman read for information a letter from the Standard Oil Company, of Iowa, dated San Francisco, March 16, 1905, inclosing copy of communication to the chief engineer, giving information as to the sources of supply, prices, etc., of fuel oil.

The recommendation of the purchasing and shipping agent for the appointment of Mr. B. W. Wrenn, of 32 Park Row, New York City, inspector, was approved, at a salary of \$2,000 per annum.

The chief engineer's cablegram of March 25, 1905, requesting information as to the conclusion arrived at with regard to plumbing rules and regulations, and as to sanitary conditions, was ordered referred to the committee on sanitation for consideration, in connection with the "Rules and regulations governing the installation of sanitary plumbing of water and drainage system for the cities of Panama and Colon, and the Isthmian Canal Commission," submitted by the chief engineer, under date of December 20, 1904.

The chief engineer's cablegram of March 24, 1905, advising that he wanted only 95-ton shovels, was ordered referred to the purchasing and shipping agent, with directions to advertise only for 95-ton shovels (12 shovels, with an option for 12 additional), the former action authorizing the purchase of 70-ton shovels being modified by this action.

The recommendations of the chief engineer contained in his letter of March 15, 1905, that the material and supplies department be reorganized as a subdepartment of the engineering and construction department was held under advisement.

The chairman read a communication from the chief engineer, dated March 4, 1905, requesting to be furnished reports, maps, and details on which the estimates of the former Isthmian Canal Commission were based.

The chairman was directed to notify the chief engineer that as soon as the reports are received from the Government Printing Office copies will be sent him.

The chairman read the report of the board consisting of Gen. George W. Davis, U. S. Army; Chief Engineer John F. Wallace, and Paymaster E. C. Tobey, U. S. Navy, appointed for the purpose of reporting upon and selecting a site for the erection of barracks for troops stationed in the Canal Zone.

On motion, the report was received and the recommendations contained therein as to the three sites, viz, at Ancon, the hill known as "El Tivoli;" at Empire, on a tract of land owned by the Panama Railroad Company, and at Cristobal, near Mt. Hope Station, were approved.

Mr. Harrod, from the special committee, to whom was referred the matter of purchasing a bound collection of Isthmian Canal documents, reported favorably, and, on motion, it was resolved:

That the chairman be authorized to purchase the canal documents collected and offered for sale by Mr. Gorman at the price of \$347.70.

Mr. Grunsky introduced resolutions relating to conditions on the Isthmus, but in view of the fact that the Commission is about to be reorganized, these resolutions, after some discussion, were withdrawn.

At 1.10 p. m., the Commission adjourned, subject to the call of the chairman.

NINETIETH MEETING.

EVENING STAR BUILDING,
Washington, D. C., March 29, 1905.

The Commission met at the call of the chairman at 11 o'clock a. m.
Present: Chairman Walker, Messrs. Burr, Harrod, Parsons, and Grunsky.

Absent: Governor Davis, on duty on the Isthmus of Panama.

The minutes of the eighty-ninth meeting were read and approved.

The chairman laid before the meeting the request of the chief of the department of material and supplies that 10,000 yards of 18-mesh copper bronze netting be purchased for immediate use in Panama and vicinity, with the recommendation of the purchasing and shipping agent that he be given authority to make emergency purchase of the same.

On motion of Mr. Harrod it was ordered that the mosquito netting required be procured by an emergency purchase.

Requisitions 346-C and 348-C for commissary supplies, with letter of the purchasing and shipping agent asking for instructions, were considered and, on motion of Mr. Harrod, the purchasing and shipping agent was authorized to buy the same in open market.

The recommendation of the purchasing and shipping agent for the transfer of Mr. J. E. Young from clerk, at \$1,200, in the office of the chief of staff of the War College, for duty in the office of the purchasing and shipping agent, at a salary of \$1,600, was approved, as was also his recommendation for the appointment of a stenographer and typewriter, at \$900 per annum, for duty in the office of the assistant purchasing and shipping agent at New York City.

The recommendation of the purchasing and shipping agent that Mr. Fred. R. Parks, of Washington, D. C., be appointed assistant shipping agent at a salary of \$1,800 per annum was approved.

Mr. Harrod offered the following resolution:

Whereas the method of public advertisement for the purchase of material and supplies as adopted by the Government and by this Commission and interpreted by the Comptroller of the Treasury involves the obligation to make awards to the lowest bidders complying with the specifications; and

Whereas if the Commission now intends changing or attaching other conditions to this method, the "General instructions to bidders" should be modified and the causes for rejection defined: Therefore be it

Resolved, That the executive committee be directed to prepare a form of "General instructions to bidders" which will inform them of the future policy of the Commission in the matter of adjudication.

On motion, the resolution was adopted.

At 12.45 o'clock p. m. the Commission took a recess until 3 o'clock p. m., at which time they reassembled.

Consideration was given to the propositions submitted by the Ingersoll-Sergeant Drill Company by its president, Mr. W. L. Saunders, and by the Rand Drill Company by its vice-president, Mr. G. H. Sampson, for furnishing standard rock drills, with additional parts, and, on motion of Mr. Harrod, it was resolved that each of the companies mentioned be awarded a contract for twenty-five 3½-inch drills and twenty-five 4½-inch drills complete, with all additional parts, as contained and specified in their bids, both dated March 29, 1905, at the prices therein offered.

The chairman desired his vote to be recorded in the negative upon the proposition, expressing the opinion that all awards should be made to the lowest responsible bidders.

The chairman presented a letter from Mr. Daniel W. Harmon, dated March 26, 1905, from Nashville, Tenn., requesting the extension of his leave of absence for two weeks, owing to illness in his family. This was accompanied by a letter from Dr. H. R. Carter, acting director of hospitals, suggesting that application for this leave be made at the Washington office of the Commission.

The application was ordered approved for two weeks' leave of absence under the rules regarding leaves of absence already adopted by the Commission.

Mr. Grunsky, of the committee on sanitation, presented the following report.

The committee on sanitation has had under consideration the letter of Governor Davis, dated March 15, 1905, recommending certain definite provisions for the care of the indigent sick, the insane, and the lepers of the Republic of Panama, as required by the Executive Order of the President of the United States, promulgated by the Secretary of War, on December 3, 1904, as follows:

"The United States will construct, maintain, and conduct a hospital, or hospitals, either in the Canal Zone or in the territory of the Republic, at its option, for the treatment of persons insane or afflicted with the disease of leprosy and the indigent sick; and the United States will accept for treatment therein such persons of said classes as the Republic may request."

This obligation is conditioned upon, first, that the Republic of Panama shall furnish, without cost, the requisite land upon which to establish the said institutions if the United States should locate them within the territory of the Republic; and, second, that the Secretary of War shall fix the per capita charge in respect to each patient entering these institutions upon the request of the authorities of the Republic.

In this connection Governor Davis has made certain definite recommendations to the Republic of Panama, which have received the approval of the President of the Republic. His recommendations include the establishment of a hospital for the insane and for lepers on the grounds of the Ancon Hospital, buildings for these purposes to be located on the spur of Ancon Hill jutting out to the north and to the northwest, beyond and closely adjoining the ward buildings known as the Strangers' Hospital.

To suitably care for the indigent sick it is proposed to repair and improve the present hospital of Panama, known as "San Tomas Hospital," which is to have one of the Commission's health officers in charge, and is to be managed by a board of six directors, consisting of a president, a treasurer, and three members, this board to be appointed by the President of the Republic and by the governor of the Canal Zone, acting conjointly; the hospital to have a superintendent who shall be a doctor of the health department of the Canal Zone government, and this superintendent shall also be a member of the board of directors.

It is proposed to place all housekeeping and domestic economy arrangements of the hospital in the immediate charge of the Sisters of St. Vincent de Paul, of whom twelve will be required, these sisters to take orders and carry out the directions of the superintendent of the hospital, who would, of course, be subject to the control of the board of directors.

Under the arrangements tentatively approved by the President of the Republic, the Government of the Republic is to pay over to the government of the Canal Zone, for use in the establishment of these institutions and in connection with the repairs of the San Tomas Hospital, such sum of money as has been already appropriated by the National Assembly of the Republic, which is now available for expenditure in connection with the creation of these hospitals. The sum is understood to be about \$40,800 gold.

The Government of the Republic is also to turn over, for use of the San Tomas Hospital, the income of the Comisión de Beneficiencia, the contributions for hospital purposes of the municipality of Panama, of the Government of the Republic, moneys received from lotteries and from miscellaneous sources, the aggregate of which sums is about \$1,500 per month.

The committee favors the carrying out of the recommendations made by Governor Davis, and suggests a reference of this matter to the general counsel for advice relating to the steps which should be taken to put these recommendations into effect.

On motion, the report was accepted and approved.

Regarding the application of Mr. G. C. Pierce, clerk in the office of the chief quarantine officer, for increase of salary to \$150 per month, with the remarks of Governor Davis concerning the same, Mr. Parsons,

of the executive committee, recommended that Mr. Pierce be granted a temporary increase of salary during the period that he is performing double duty in the quarantine office.

On motion of Mr. Burr it was

Resolved, That Mr. Pierce's salary be increased to \$150 per month, until such time as the services of a competent physician are secured as assistant quarantine officer at Panama, when Mr. Pierce's salary is to be restored to the original amount of \$125 per month.

On motion, the resolution was approved.

Respecting the recommendation of the chief engineer that Capt. Edward L. King, general quartermaster, be authorized to sign vouchers for sums of \$100 or less, Mr. Parsons, of the executive committee, recommended that the matter be laid over, pending the arrival of the chief engineer in this country.

On motion, the recommendation was approved.

The chief engineer's request of March 1, 1905, that the Commission instruct him as to whether or not the different classes of employees engaged upon the Isthmus are entitled to the same advantages as are given to men engaged in the United States and sent there, was considered, and Mr. Parsons, of the executive committee, recommended that the matter also be laid over, pending the arrival of the chief engineer.

The same course was adopted relative to the chief engineer's recommendations respecting leaves of absence, as outlined in his letter of March 2, 1905, and his recommendations of the same date respecting the inspection of railroad machinery and appliances by Robert W. Hunt & Co.

A letter from Governor Davis, dated February 27, 1905, respecting action taken in the matter of six weeks' leave of absence to salaried employees at the fourteenth meeting of the Commission; circular No. 3 of the Commission, dated November 3, 1904, and the resolution relating to the same subject adopted at the thirty-ninth meeting of the Commission, with his remarks and recommendations thereon, was read, and Mr. Parsons, of the executive committee, recommended that no distinction be made between American employees engaged in the United States and those engaged on the Isthmus.

On motion, the recommendation was received and adopted.

Mr. Parsons, of the executive committee, also reported progress in the matter of the purchase of a seagoing tug, recommended by the chief engineer under date of March 7, 1905, and in the preparation of plans for the same.

The chairman read a communication from the Secretary of War, dated March 29, 1905, respecting the purchase of the outstanding stock of the Panama Railroad Company, and, on motion of Mr. Parsons, it was resolved that, in accordance with the direction of the Secretary of War as contained in his letter of March 29, 1905, that there be, and there is hereby, authorized a payment of \$72,120 to Mr. William Nelson Cromwell for the purchase of 270 shares of the stock of the Panama Railroad Company.

The chairman laid before the meeting a communication from Mr. Guillard Hunt, of the Department of State, dated March 29, 1905, respecting design for the official seal of the Canal Zone, and offering to undertake the work of preparing the same. The chairman was instructed to request Mr. Hunt to undertake the preparation of the seal, incurring such expense as may be necessary.

On motion, the Commission adjourned at 4.10 o'clock p. m.

LETTER FROM THE SECRETARY OF WAR TO THE PRESIDENT,
TRANSMITTING ANNUAL REPORTS OF THE ISTHMIAN
CANAL COMMISSION AND OF THE PRESIDENT
OF THE PANAMA RAILROAD COMPANY.

[illegible]

WAR DEPARTMENT,
Washington, January 3, 1905.

SIR: In accordance with your Executive order of April 1, 1903, I hereby transmit the annual report of the Isthmian Canal Commission, and the annual report of Mr. Shonts, as president of the Panama Railroad Company.

In my annual report as Secretary of War, I have discussed at length the work which has been done upon the Isthmus under the Commission's direction, and it is unnecessary for me, therefore, further to dwell upon it.

I may say, with respect to the consulting board of engineers, that there are to be two reports—a majority report and a minority report; that the majority report has already been prepared in accordance with the resolutions passed by the consulting board, but that it is not ready for formal submission until it shall have been examined and signed by the European members of the board. General Davis, the chairman of the board, sailed on Saturday, December 30, 1905, for Europe, expecting to meet all the European members of the board at Brussels on Tuesday, the 9th of January. I am in daily expectation of receiving from him a cable confirming the report, a draft of which he has already delivered to me. The minority report is in a state of preparation, and will doubtless be handed to the Isthmian Canal Commission within the next week. I have directed the Commission to proceed with due speed to consider the issues made by the majority and minority report, and, after full consultation with the chief engineer, Mr. Stevens, to make report as to their views. It is hoped that the whole matter can be presented to you for submission to Congress before the 1st of February.

There are two transactions referred to in the report of the president of the railroad company of which special mention should be made. In December, at a time when the creditors of the railroad company were urgent in demanding the payment of their bills, and when the railroad company was not able to meet its obligations because the Canal Commission were unable to pay the railroad company what was due it, the president and directors sold 628 one thousand dollar 4½ per cent bonds, which had been in the treasury of the corporation ever since the United States acquired a controlling interest in its shares. The bonds had been placed there by the former management for the purpose of using them in order to improve the equipment of the road. On November 8 last the directors authorized the executive officers to issue the bonds, and after written invitation to several probable purchasers they were sold on the 11th day of November to Mackay & Co., bankers, as the highest bidders. One hundred and seventy-five thousand dollars of the purchase price was paid on November 11, though the bonds were not delivered until the 24th of November. The purchasers paid par and a premium of 5 per cent for the bonds.

It has been suggested that, as the Government owned all the shares of the railroad company, and was in fact the owner of the road, the sale of the company's bonds was in effect to increase the indebtedness

to which the Government property might be subjected, and in this way indirectly to increase the indebtedness of the Government, and that such power ought not to be exercised without special authority from Congress. On the other hand, it may be pointed out that the company still preserves its character as a corporation by the acquiescence of Congress, and that under the charter the directors had the power to issue the bonds and bind the company no matter who owned the shares.

The question of issuing the bonds was not submitted to you or to me before final action was taken by the board of directors. The policy of selling the bonds was a doubtful one, and should not have been adopted until after a conference with higher governmental authority. I have not the slightest doubt that the president and directors of the company acted in entire good faith in what they did, and, as they thought, for the best interests of the Government; but considering the anomalous and peculiar relations between the directors and the company and the Government, the bonds should not have been issued without your approval or mine. In view of this fact, by your authority, I instructed the president of the railroad company to proceed at once to repurchase the bonds. The bonds themselves contained a stipulation providing that they might be redeemed either on the 1st of October or the 1st of April by the payment of the previous six months' interest, the principal, and a premium of 5 per cent.

Arrangements were made with the purchasers by which the bonds were bought back at the premium paid, 105 and accrued interest to date of repurchase from the 1st of October. To make the repurchase it was at first thought necessary for the railroad company to borrow \$400,000 from the Canal Commission, and the opinion of the Attorney-General was asked as to whether the Canal Commission had the authority to lend the money to the railroad company for this purpose. The opinion of the Acting Attorney-General, answering in the affirmative, is among the appendixes to this letter. It subsequently appeared that the indebtedness of the Canal Commission to the railroad company was quite large enough to supply to the railroad company the needed funds with which to take up the bonds without borrowing from the Commission. The executive officers of the railroad company have been advised of their error, and hereafter questions of this character will not be acted on finally by the Commission or the directors of the railroad company until after conference with the proper authorities.

Another matter calling for comment is the cancellation of the so-called Markel contract and subsequent settlement. In March, 1905, it became an urgent question how the employees of the Canal Commission and of the railway company on the Isthmus could obtain proper food at reasonable prices. Chief Engineer Wallace knew J. E. Markel, of Omaha, as a contractor engaged by railroad companies to feed boarding camps and to cater for railroad hotels and restaurants. Mr. Markel had been in the business for fifty years, and had carried out large contracts of this kind in construction work done by the Union Pacific Railroad, the Illinois Central Railroad, and other large railway systems of the West. Mr. Wallace in March last wrote to Mr. Markel and invited him to come to the Isthmus and look the ground over with a view to making an arrangement to feed all the employees on terms satisfactory to the Government and himself. The letter did not reach Mr. Markel until May, when he answered accepting the suggestion,

and, with his son and partner and private secretary, visited the Isthmus about the 1st of July, returning to this country after a month's stay upon the Isthmus, and after an absence of something like six weeks.

During his stay upon the Isthmus he met Mr. Shonts and Mr. Stevens, Mr. Wallace's successor, and Governor Magoon. He had brought with him plans for refrigerators, for laundries, and for all the equipment necessary to carry on the project in which he was interested, and he discussed the subject and the proper course to be taken with the members of the Canal Commission on the ground, leaving with them a written report and plans and specifications which he had obtained in this country from provision houses, laundry manufacturing establishments, and other expert sources. He returned to New York on the 8th of August. Mr. Shonts returned on August 14th and at once prepared specifications upon which bids to feed the employees were invited. The contract was awarded to Mr. Markel as the lowest bidder on the 7th of September. When news of the contract reached the Isthmus, Mr. Stevens by cable objected to it as fixing too high a price, and thereupon a clause was introduced into the contract, by the consent of Mr. Markel, by which the company was permitted to cancel the contract at any time in the discretion of the president.

Therefore the provision of the contract had been that after thirty days' notice it might be canceled if the contractor was not discharging his duty to the satisfaction of the general manager of the company. Mr. Markel, in anticipation of fulfilling the contract, and before the introduction of this new cancellation clause, had brought to New York twelve experts—cooks, hotel superintendents, clerks, and others—with whom to begin at once the work contracted for. In view of the new cancellation clause, he took only four persons to the Isthmus, and the others were directed to remain in New York until the matter in respect to the contract was definitely settled. On the 22d of September Mr. Shonts and Mr. Markel sailed for the Isthmus, and did not return until the 17th of October. During this time, after a conference between Mr. Shonts, Mr. Stevens, and Governor Magoon, the notice of cancellation, in accordance with the new clause, was given and accepted, Mr. Shonts and Governor Magoon then stating that Mr. Markel ought to be, and would be compensated for his loss of time and money, and for services which had inured to the benefit of the Government. The reason for the cancellation of the contract was that, in carrying out Mr. Markel's recommendations, the railroad company, under Mr. Stevens, had been able to furnish food to its employees and those of the Commission at a less price than that fixed in the contract. Markel still insists that the estimate of cost made by him was reasonable and that the results obtained by the company were due to two circumstances—one that all the elements of cost to the contractor were not included in the railroad company's estimate for the cost of first-class meals, and the other that the specifications of the contract required for meals for the second class of employees a more expensive meal than the company was actually furnishing. In view of the cancellation of the contract, it is unnecessary to consider this issue further.

At a meeting of the railroad directors on November 8 Mr. Markel presented his claim for his actual outlay, amounting to \$5,745.97, and also a claim for the value of his time and services. The directors, at

the instance of Mr. Shonts, voted to allow Mr. Markel for his expenses and services the sum of \$10,745.97, and the money was paid at once. This action was taken without consulting either you or me, and was not brought to my attention until some time after my return from Panama on the 15th of November. Looked at from a purely and strictly legal standpoint, if the amendment of the contract with respect to the cancellation at the discretion of the president was to be strictly construed, a cancellation would end the obligations of both parties under it and leave them without any claim for damage by either against the other, and therefore Mr. Markel would seem to have no claim for either his expenses or his services against the railroad company after the right of absolute cancellation had been exercised by the president. In other words, it would appear that the payment ordered by the directors was gratuitous and without legal consideration.

On the other hand, the moral and meritorious consideration arising from the fact that Mr. Markel had actually rendered valuable expert services to the railroad company, had made an actual outlay of more than \$5,000, all in anticipation of securing the contract and relying on the permanence of the contract, would justify a good business man, with whom such a transaction was had, in compensating him for his loss of money, time, and services. It is perfectly plain from Mr. Markel's own evidence that if he had been permitted to carry on the contract, indeed if he had bid and not been awarded the contract, he never would have considered the railroad company indebted to him for anything. The directors, however, thought that the circumstances under which the final cancellation clause had been obtained and the benefit which they had actually derived from Mr. Markel's services, required that they should make him whole.

That they acted in this regard in good faith and with a due regard to their trust I have no doubt. In reply to my criticism and disapproval in these two cases, the president of the railroad company has answered that the course taken was plainly within the corporate power of the directors and was supported by advice of counsel. I think, however, that these were issues of such importance and doubt that they should have been submitted to you or to me, as your representative, for approval. Undoubtedly a board of directors, acting for a corporation with individuals as stockholders, might exercise the discretion which was exercised here by the directors; but, as between the Government and the president and directors of the company, the exercise of such a discretion is only safe when approved by the president or his representative. I have so advised the president and directors of the company in order to prevent a departure from this principle in future.

I have deemed it my duty, in view of the fact that the matter was not submitted either to you or to me until after the final action of the board, to investigate quite fully the facts. I have received a written statement of the matter from Mr. Shonts. I have subjected Mr. Markel to a long examination; have secured from him all the correspondence throwing light on the subject, and have requested from him the vouchers for such of his expenses as he will be able to furnish. The examination and the correspondence I append to this letter. The vouchers Mr. Markel has not yet been able to send me. If complete vouchers are not forthcoming it will not be significant, because when the expenses were incurred Markel did not suppose that they would

form the basis of a claim against the Government, and moreover a large part of the money was expended for traveling, for which it is unusual to obtain receipts. I think no one can read his evidence without being convinced that the claim which was allowed by the railroad company was meritorious and moderate. I have submitted the question to the Attorney-General whether you may legally confirm the action of the railroad company and make the payment a legal one. The opinion of the Attorney-General in the affirmative will be found as an appendix.

I respectfully recommend that the action of the Commission in settling with Mr. Markel now have your formal confirmation. I further request that the two reports and this letter of transmittal, with its appendices, be submitted to Congress.

The annual reports hereby transmitted contain a résumé of all the expenditures under the authority of the Canal Commission or by the Panama Railroad Company, as detailed as such reports usually are. To make them more detailed and to state all the individual items of expenditure would involve so bulky a mass of record as to be practically useless.

In this connection I beg to call your attention to the experience of the War Department in reference to expenditures in Cuba and in the Philippines. Congress appropriated \$30,000 for extra clerk hire with which to prepare for submission to it an itemized statement of every expenditure made under either the government of Cuba or the government of the Philippines from the time of the American occupation until July 30, 1902. In accordance with this, after eight months of work by the additional clerks, the statements were made and the Cuban expenditures were printed in six large volumes. Pursuing the same policy, the War Department forwarded to the Senate Committee on the Philippines a typewritten statement of every expenditure in the Philippines from the date of American occupation to July 30, 1902. It was found by investigation that the printing of this document would cost about \$80,000, and the War Department was directed by the Senate committee to take back this itemized statement, to classify the expenditures and make a short report of the same, which was done and was published as a Senate document. It seems unwise to repeat this experience except by Congressional direction. As in the case of the Insular Bureau with reference to the itemized expenditures in the Philippines, so the Canal Commission and the railroad company have records from which an itemized statement of every expenditure can be transcribed with a sufficient additional force of clerks and sufficient time, and the Canal Commission holds itself in readiness to make such a statement if desired, or to make an itemized statement on any particular class of expenditure which Congress or either House may request. Those who are responsible for the work of the Canal Commission court investigation of the most thorough character into everything which has been done under its authority.

Very respectfully, yours,

WM. H. TAFT,

Secretary of War.

The PRESIDENT.

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THE WHITE HOUSE,
Washington, January 4, 1906.

To the SECRETARY OF WAR:

I have received your letter of January 3, transmitting the annual report of the Isthmian Canal Commission and the Panama Railroad Company. I hereby formally approve your actions and recommendations as therein set forth.

THEODORE ROOSEVELT.

**CORRESPONDENCE CONCERNING THE SALE OF THE PANAMA
RAILROAD COMPANY BONDS AND OPINION OF THE ACTING
ATTORNEY-GENERAL CONCERNING THE REDEMPTION OF SAID
BONDS.**

PANAMA RAILROAD COMPANY,
PANAMA RAILROAD,
PANAMA RAILROAD STEAMSHIP LINE,
New York, December 27, 1905.

Hon. WILLIAM H. TAFT,
Secretary of War, Washington, D. C.

DEAR SIR: Complying with your request at our interview this afternoon, I beg to submit herewith a summary report of the sale by the company of its 628 first mortgage 4½ per cent gold bonds theretofore held in its treasury.

Owing to exceptionally large Isthmus drafts upon the company's funds in New York, to the purchase of unusual quantities of materials and supplies for the Isthmus, and to the delay on the part of the Isthmian Canal Commission in making remittance of balances due to this company for material, transportation, and other services furnished them, this company was in a position financially that required provision in advance in order to put the company in a position to meet its due and maturing obligations. The subject was brought to the attention of the board at its meeting of November 8 by President Shonts, and authority to sell the 628 bonds was given to the officers by adoption of the resolution as per copy inclosed.

Bids were invited from three prominent financial concerns: Messrs. J. P. Morgan & Co., Messrs. William A. Read & Co., Messrs. Mackay & Co.

Messrs. Morgan & Co. declined to bid in competition; the bid of Messrs. Read & Co. was 103.07 and accrued interest; that of Messrs. Mackay & Co. 105 per cent, as per copies inclosed herewith. The latter concern accompanied their bid with an offer of an immediate advance of \$125,000 on the purchase price, if required, pending the delivery of the bonds. The offer of Messrs. Read & Co. was declined, as per copy of our letter inclosed, and the offer of Messrs. Mackay & Co. accepted, as per copies of letters inclosed. This was done after consultation with President Shonts and Mr. Cromwell, of the executive committee, as noted on the inclosed copy of memorandum, dated November 11.

There was no condition in the sale by which the railroad company was given the right to repurchase these bonds, although article 7, page 20, of the inclosed copy of the mortgage, shows the company's right to call them at 105 and accrued interest upon either semiannual interest date—April 1 or October 1—of each year. I inclose sample copy of the bond herewith.

As instructed to-day, I acted immediately upon the authority you gave me to accept the offer of Messrs. Mackay & Co. to resell to us the 606 of the 628 bonds they still had in hand and which they had

immediately withdrawn from the market upon learning of the company's wish to recover them and held pending acceptance of their offer to us at 105 per cent and accrued interest. The remaining 22 bonds they expect to be able to recover shortly from clients with whom they had placed them. They will be transferred to us at the same price, 105 and accrued interest.

As per your instructions I telephoned to the general auditor of the Isthmian Canal Commission to transfer to New York the necessary funds, \$642,890.25, and was advised that he had made arrangements to comply.

I send you herewith the best copy of the mortgage I have on file.

Respectfully, yours.

E. A. DRAKE,
Assistant to the President.

P. S.—Since writing the above, Disbursing Officer Jester, of the Isthmian Canal Commission, came to the office and by your authority reduced the amount to be transferred to \$400,000, for which amount I gave receipt, as usual, and thereafter deposited, drawing upon our funds in bank and trust companies to the amount of \$642,890.25 in favor of Messrs. Mackay & Co., from whom I have just received the 606 bonds repurchased. I am just in receipt of notice from them that they have secured the remaining 22 bonds, all of which they will be prepared to deliver to us at short notice, as above stated.

All of which is respectfully submitted.

E. A. DRAKE,
Assistant to the President.

[Extract from draft of minutes of a meeting of the board of directors of the Panama Railroad Company, held on Wednesday, November 8, 1905.]

Present: Messrs. Shonts, Cromwell, Endicott, Hains, Obaldia, Farnham, and Drake.

Financial condition.

Consideration was given to the necessity for providing means for the payment of the equipment authorized by the board as well as for other important improvements to the company's property and facilities on the Isthmus, which were being undertaken so as to provide for the prompt, economical, and profitable handling of the large amount of traffic to be expected from the general development of commerce, and the construction of the Isthmian Canal; and the president outlined to the board the many improvements which had been undertaken and which were under contemplation, among them being the construction of new piers at the Atlantic terminus, the extension of existing piers, the installation of modern facilities for the prompt handling of coal and general cargo from steamers, the erection of refrigerating plant, laundry, and bakery, and the construction of an additional pier at La Boca.

The president also explained that during the period of installation of these modern facilities the expenses of conducting the property would, as usual in such cases, increase to a much larger extent than the earnings, and that while the payment of the balance of, approximately, \$450,000 due to the company by the Isthmian Canal Commission would probably be made in the course of a few months, it would become necessary to provide promptly for the payment of indebtedness already or about to become due.

The board heartily approved of the steps that had been taken to develop and improve the company's facilities and were of the opinion that the sale of the 628 $\frac{1}{4}$ per cent bonds, now held in the company's treasury, would probably realize sufficient funds to meet existing requirements; therefore, upon motion of Director Cromwell, the following resolution was unanimously adopted:

Resolved, That the executive officers be, and they are hereby, authorized to sell the 628 Panama Railroad $\frac{1}{4}$ per cent twenty-year sinking-fund gold bonds, now held in the treasury, at as favorable a price as possible, but not less than 104 $\frac{1}{4}$, the proceeds thereof to be applied to the purchase of equipment and the improvement of the company's facilities.

It was further

Resolved, That upon completion of the sale of the 628 Panama Railroad 4½ per cent twenty-year sinking-fund gold bonds above authorized, at not less than 104½, the officers be, and they are hereby, directed and authorized to take the proper steps for the listing of same on the New York Stock Exchange; and the committee of securities are hereby requested to remove said bonds from the company's vaults and hand same to the treasurer of the company for delivery to the parties to whom the bonds are sold.

W. A. READ & Co., 25 NASSAU STREET,
New York, November 11, 1905.

E. A. DRAKE, Esq.,
Vice-President Panama Railroad Company,
24 State Street, New York, N. Y.

DEAR SIR: Referring to the conversation had with you yesterday at our office, we beg to advise you that we will pay 103.07 and accrued interest for the \$628,000 Panama Railroad Company first-mortgage 4½ per cent twenty-year gold bonds, due October 1, 1917, interest payable April and October.

Thanking you for the opportunity of bidding, and awaiting your reply, we are,

Yours, very truly, W. A. READ & Co.

MACKAY & Co.,
New York, November 11, 1905.

EDWARD A. DRAKE, Esq.,
Secretary and Treasurer Panama Railroad Company,
New York City.

DEAR SIR: We beg to confirm the purchase from you to-day of \$628,000 Panama Railroad sinking fund 4½ per cent bonds, due October, 1917, at 105 flat, net; the bonds to be delivered to us as soon as convenient to you after they are listed on the New York Stock Exchange. Upon delivery to us of the bonds we will credit the account of the Panama Railroad Company with the entire proceeds, subject to sight draft, and allow you interest on the moneys so standing to your credit at the rate of 4 per cent per annum.

We are, yours, very truly, MACKAY & Co.

MACKAY & Co.,
New York, November 11, 1905.

EDWARD A. DRAKE, Esq.,
Secretary and Treasurer Panama Railroad Company,
New York City.

DEAR SIR: Referring to the purchase we have made from you this day of \$628,000 Panama Railroad Company sinking fund 4½ per cent bonds, due October, 1917, and which bonds you are not prepared to deliver at present, we beg to state that in case you find it necessary to use any of the money for your company prior to the delivery of the bonds we will give you a credit on our books, subject to sight draft up to the amount of \$125,000, which you may draw against as you

need funds with the understanding that whatever portion of said \$125,000 you may draw will be deducted from the amount due your company upon delivery of the bonds.

Yours, truly,

MACKAY & Co.

PANAMA RAILROAD COMPANY,
PANAMA RAILROAD,
PANAMA RAILROAD STEAMSHIP LINE,
New York, November 11, 1905.

Messrs. W. A. READ & Co.,
25 Nassau street, New York.

GENTLEMEN: We acknowledge receipt of your letter of the 11th instant, but find ourselves unable to accept the offer therein contained for the reason that we have received a more favorable bid.

Truly yours,

E. A. DRAKE,
Assistant to the President.

PANAMA RAILROAD COMPANY,
PANAMA RAILROAD,
PANAMA RAILROAD STEAMSHIP LINE,
New York, November 11, 1905.

Messrs. MACKAY & Co.,
16 Nassau street, City.

GENTLEMEN: We are in receipt of your two letters of even date, which recite the conditions under which the sale was to-day made by this company to you of 628 Panama Railroad sinking fund $4\frac{1}{2}$ per cent bonds, due October, 1917, which, as stated, we find to be in entire accord with our understanding and are hereby confirmed.

Yours, truly,

PANAMA RAILROAD COMPANY,
Per E. A. DRAKE, *Secretary and Treasurer.*

[Memorandum re sale of bonds.]

Bids were invited from Mackay & Co., William A. Read & Co., and J. P. Morgan & Co. Attached are bids from two of the above concerns, Mr. Morgan declining to make a competitive bid, but stated that if we were prepared to deal at once, he would make us an offer. Accordingly, after consultation with Mr. Shonts and Mr. Cromwell, the bid of Mackay & Co., 105 flat, net, was accepted, as per their attached letters, and was reported by telephone to Mr. Shonts at the Waldorf, who approved of this action.

NOVEMBER 11, 1905.

DEPARTMENT OF JUSTICE,
Washington, December 27, 1905.

The SECRETARY OF WAR.

SIR: In reply to your oral request for an opinion, received an hour ago, upon the question whether the President has authority to turn

over to the Panama Railroad Company money sufficient to redeem 628 \$1,000 bonds of that company, I have to say:

The facts appear to be that these bonds are a part of an issue authorized in 1897, primarily to take up a mortgage indebtedness maturing and partly to pay for improvements to the property and the like.

Two million dollars were expended in taking up the old indebtedness. Some other amounts were applied, before the purchase of the property by the United States, to securing improvements, and the bonds now in question remained untouched in the company's treasury.

Last November the directors of the company authorized these bonds to be sold, to raise money to pay for necessary improvements, and it is now desired to secure their return to the company's treasury and pay for the improvements, etc., otherwise than with the proceeds of such bonds.

The Panama Railroad now belongs to the United States, and its operation is necessary for the construction of the canal.

The company has incurred various obligations for essential improvements now maturing. The power of the President under section 5 of the so-called Spooner Act seems to me very broad. He is authorized, as I read that section, to enter into any contracts he may deem necessary to accomplish the proper excavation, construction, completion, and defense of the canal, etc. I do not understand that he is confined to making contracts to defend, complete, construct, or excavate. He is to make such contracts of any kind as he deems necessary to accomplish certain ends. If he deems it necessary to the accomplishment of any of those ends to enter into a transaction of the kind now proposed, in my opinion he would not exceed his authority.

Respectfully,

M. D. PURDY,

Assistant Secretary.

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**CORRESPONDENCE BETWEEN THE SECRETARY OF WAR AND
THE CHAIRMAN OF THE ISTHMIAN CANAL COMMISSION CON-
CERNING THE SETTLEMENT OF THE MARKEL CONTRACT FOR
HOUSING AND FEEDING EMPLOYEES OF THE COMMISSION IN
THE CANAL ZONE.**

ISTHMIAN CANAL AFFAIRS,
OFFICE OF ADMINISTRATION,
Washington, D. C., December 8, 1905.

MEMORANDUM for the Secretary of War.

I am advised that you are desirous of obtaining further information relative to a payment which you understood was made to Mr. Markel, account of services rendered and expenses in connection with the inauguration by the Commission of facilities for housing and feeding its employees.

The nature of this payment is completely set forth in the voucher covering the same, a copy of which is hereto attached.

This voucher shows that Chief Engineer Wallace did invite and request Mr. Markel to come to the Isthmus to aid in this work. The original of Mr. Wallace's letter was submitted by Mr. Markel to the board of directors of the Panama Railroad, upon its request, for the purpose of making a copy of the same for its office files. A reference to this letter is shown in the attached voucher. The New York office will to-day be requested to forward to Washington a copy of such letter.

T. P. SHONTS, *Chairman.*

ISTHMIAN CANAL AFFAIRS,
OFFICE OF ADMINISTRATION, PANAMA CANAL BUILDING,
Washington, D. C., December 8, 1905.

MY DEAR MR. SECRETARY: In connection with my memorandum of this date, transmitting, in compliance with your request, a copy of the voucher covering payment by the Panama Railroad of a certain sum to Mr. Jacob E. Markel, of Omaha, I wish to take advantage of the opportunity to advise you more fully relative to this entire matter, as you were absent in the Philippines during the time this subject-matter was under consideration.

Upon the occasion of the first visit to the Isthmus of the present Canal Commission it found that while the question of housing the employees had received some consideration, nothing had been done to provide for feeding them. The population of the Isthmus was increasing at a rapid rate, due to the bringing in of employees for work on the canal; and as the producers of the food supply in that country seemed never to look beyond their immediate necessities, no surplus

had accumulated, which was, in fact, intensified by the total failure of crops for two preceding years and the further fact that many of the agriculturists had abandoned their farms for work on the canal, where they received higher pay for shorter hours.

The work on the canal could never be vigorously prosecuted unless wholesome food at reasonable prices could be furnished all employees. The Commission immediately arranged to extend to all employees of whatever grade the privilege of purchasing at the local commissaries owned and operated by the Panama Railroad and assumed the management of two hotels, leasing a third one. At this time the Commission found on the Isthmus a Mr. Markel, who had been requested by Chief Engineer Wallace to go there to study the food-supply problem and to make recommendations, and who had been also requested by Governor Magoon to remain there until the arrival of the other members of the Commission in order to give them the benefit of his views.

It was the decision of the Commission that the Government should furnish the plant and guarantee transportation facilities, but should grant a concession for the actual management and furnishing of the food supply, cooked and uncooked. In furtherance of this general plan the services of Mr. Markel were utilized in an expert capacity in the location of commissary storehouses and of hotels and in the preparation of the many details necessary for the proper regulation of this work.

Some time thereafter, with the general principles fairly well worked out, the Panama Railroad invited proposals by correspondence for the furnishing of meals, cooked and uncooked, to the different classes of employees on the Isthmus. Upon the receipt of these proposals, based upon prices, experience, and organization, the concession was granted to Mr. Markel as most advantageous to the railroad and to the employees. Upon receiving this concession Mr. Markel rearranged his plans in this country, going to considerable expense and employing many men to be associated with him on the Isthmus. However, between the time the concession was granted and the time Mr. Markel was prepared to proceed to Panama to enter upon his duty, in company with the Commission on one of its trips, Mr. Stevens made such substantial progress in bringing about an improved condition of affairs with reference to the feeding of the employees that it was decided it would be best to hold the matter in abeyance until the arrival of the Commission, with Mr. Markel, on the Isthmus. Therefore Mr. Markel's employees were left behind, but he was taken along, and upon arrival on the Isthmus, having in mind the progress made, the fact that it would be some time before the cold-storage plant and additional hotels in process of construction would be finished, and as such improvement had been made in the handling of this work by direct act of the Commission, it was thought best, after further consultation to abrogate the concession for the present.

Should the future develop that it would be more economical in point of time or energy to award this privilege to others than to assume it by our own organization, the question will be reopened, and by that time the cold-storage plant and many additional hotels will have been completed and the Commission will be in a better position to determine exactly what would be a fair price for feeding the men should it be determined to award that privilege to others.

In view of the fact that the commissary storehouses, which would enter so largely into this proposition, are owned and operated by the Panama Railroad, and the further fact that the question of transportation also enters so largely into this matter, it was the opinion that the arrangement if made should be between the Panama Railroad and the concessionaire and not between the Commission and the concessionaire.

To properly feed the employees demands the establishment of a line of refrigeration from New York to all points on the line of the canal, which is merely an improvement of the transportation facilities of the Panama Railroad and Steamship Line.

The Panama Railroad availed itself of the expert services and advice of Mr. Markel and several assistants for a period of six months in the working out of its hotel and messing arrangements, and for this reason upon the withdrawal of the concession, at a meeting of the directorate of such railroad it authorized the payment to Mr. Markel of a fixed sum to reimburse him for services rendered and for expenses incurred, as has been and will be done whenever necessary to employ experts in any line for temporary service.

Full details relative to this payment are set forth in the attached extract from the minutes of the meeting of the board of directors of the Panama Railroad and in the copy of the voucher covering the payment.

Very truly, yours,

T. P. SHONTS.

The Honorable the SECRETARY OF WAR.

[Extract from the minutes of the meeting of the board of directors of the Panama Railroad Company held in New York on November 8, 1905.]

Contract for feeding of employees.

The president advised the board that upon the occasion of his first visit to the Isthmus he was much impressed, by his observation of existing conditions as well as by the urgent solicitations of the directors, officials, and employees of the company there, with the pressing necessity for immediately perfecting arrangements for the proper feeding of employees; that upon his return from the Isthmus he had, after preparation of specifications, accepted the bid of Mr. Jacob E. Markel as the most satisfactory and favorable offer received in competition with other concerns to perform this service; that Mr. Markel at once began preparations to comply with his obligations, and at the same time rendered valuable assistance, because of his wide experience, in the preparation of plans looking to the establishment of a cold-storage plant, laundry, bakery, etc., at the Isthmus, all of which are necessary for the proper feeding and maintenance of employees; that upon the occasion of his last visit to the Isthmus such improvement had been made in the method of feeding employees that, after conference with Director Magoon and General Manager Stevens, it was decided that as it would probably take from three to six months before the hotels, ice plants, bakery, laundry, etc., would be sufficiently advanced to be taken over by the contractor arrangements should, if possible, be made to abrogate the contract and in the interval accumulate all possible data in order to ascertain the exact cost of the present system and what would be a fair price to allow the contractor performing this service in view of the risk involved.

That after considering all the aspects of the case with Mr. Markel, the latter had agreed to the cancellation of the contract previous to it becoming effective and without any obligation on the part of the company to reimburse him either for his services or his actual expenses, which latter amounted to \$5,745.97.

Upon motion, duly seconded, the action of the president in executing the contract with Jacob E. Markel for the feeding of employees on the Isthmus, as well as his action in arranging for the cancellation of same for the reasons stated, was unani-

mously approved; but it was the sense of the board that justice required that Mr. Markel should be voted an allowance in recognition of the valuable services he had rendered the company and be reimbursed for his actual expenses; therefore, upon motion, it was

Resolved, That for special services and expert advice rendered and disbursements made by Mr. Jacob E. Markel in the matter of installation of commissary arrangements on Isthmus, including the preparation of plans for cold storage and other necessary plants in connection with the feeding of employees, the sum of \$10,745.97 be, and the same is hereby, voted to him, this payment being in full settlement and recognition of his valuable services in the matter.

WAR DEPARTMENT,
Washington, December 19, 1905.

MY DEAR MR. SHONTS: I have your letter of December 8, 1905, concerning the contract with Jacob E. Markel, of Omaha, and its cancellation. I beg to call your attention to one thing in the record thus shown: On page 2 of the minutes of the meeting of the board of directors of November 8 it is said:

That after considering all the aspects of the case with Mr. Markel, the latter had agreed to the cancellation of the contract previous to it becoming effective, and without any obligation on the part of the company to reimburse him either for his services or his actual expenses, which latter amounted to \$5,745.97.

If this statement be true then it would seem that by mutual consent the contract was dissolved, and there was no legal obligation on the part of either party toward the other growing out of it. In this condition the action of the directors in voting to Mr. Markel something over \$10,000 would seem to be the mere payment of a gratuity without any consideration of value moving to the company, and therefore I could hardly recommend to the President an approval of the payment made to the company under the circumstances stated. I beg to invite your attention to this, and to ask for such comment as you desire to make.

Sincerely, yours,

WM. H. TAFT.

Hon. T. P. SHONTS,
Chairman Isthmian Canal Commission, Washington, D. C.

WASHINGTON, *December 19, 1905.*

MY DEAR MR. SECRETARY: In view of your letter of to-day, calling attention to the language of the minutes of the board of directors authorizing a payment to Mr. J. E. Markel, to whom a concession was granted and subsequently abrogated for the feeding of employees on the Isthmus, I wish to make a further statement of the facts in this case, in addition to those contained in my letter to you of December 8, which has a particular bearing on the point mentioned in your letter of to-day.

Mr. Markel was not present at the conference held on the Isthmus when it was decided to abrogate the concession which had been granted to him. At this conference between Governor Magoon, Chief Engineer Stevens, and myself (Mr. Jackson Smith, manager of labor and quarters, being present), Chief Engineer Stevens said he thought that

inasmuch as Mr. Markel had entered into the contract in good faith and incurred certain expenses, we should compensate him not only for his expenses but pay him for his services as an expert, to which Governor Magoon and I agreed.

In notifying Mr. Markel of the determination to cancel the contract I told him that he might leave to the sense of justice of the railroad as to what would be a fair recompense to him, including services and expenses.

The minutes of the meeting of the board of directors of the railroad dealing with this matter were subsequently prepared by the general counsel, Mr. William Nelson Cromwell, and possibly because he did not have in mind all of the facts and conditions leading up to the granting and cancellation of this concession, the minutes of the railroad, in their present form, do not fairly and accurately present the facts. A motion for their amendment in accordance with the real facts, as set forth in this communication, will therefore be moved and undoubtedly adopted at the next meeting of the board.

Very respectfully,

T. P. SHONTS, *President.*

The Honorable The SECRETARY OF WAR.

WAR DEPARTMENT.

Washington, December 20, 1905.

MY DEAR MR. SHONTS: I am in receipt of your letter of December 19, in which you explain the facts with respect to the cancellation of the Markel contract. I agree with you that the minutes should be corrected to conform to the facts. May I ask you also to include in your report upon this matter before I shall submit it to the President the letter written by Mr. Wallace inviting Mr. Markel to the Isthmus to make investigation, which I am informed by you and others verbally was the beginning of the relation between Mr. Markel and Panama matters? And will you also for purposes of explanation include the itemized statement of Mr. Markel's expenses? It may be necessary to apply to Mr. Markel for this, but I think it proper in the report which you shall make of the affairs of the railroad company to disclose all the facts, even to such details as this.

Very sincerely, yours,

WM. H. TAFT.

Hon. T. P. SHONTS.

Chairman Isthmian Canal Commission, Washington, D. C.

PANAMA RAILROAD COMPANY, PANAMA RAILROAD,
PANAMA RAILROAD STEAMSHIP LINE.

NEW YORK, December 23, 1905.

Hon. WILLIAM H. TAFT.

Secretary of War, Washington, D. C.

DEAR SIR: Concerning the Markel matter, I beg leave to reply to your favor of December 20 and to supplement my report of December 19, written at Washington, by the following:

I found upon coming to the office here that a misapprehension has

arisen concerning the minutes of the last meeting of the board of directors of the railroad company, and that I was in error in stating that Mr. Cromwell had prepared and passed upon the draft of minutes which have been the subject of our recent letters. The draft referred to, it turns out, are not the final minutes of the board, but were only a rough draft prepared to furnish me at Washington with the essential points of the business conducted at the meeting, but in a discursive and voluminous fashion, and not in the more precise and exact form which it is the habit of the company to embody the final record of the minutes.

The minutes referred to I find had not been prepared by the secretary nor passed upon by counsel as would have been done before the next meeting of the board, but as I found them in my files at Washington, I had supposed the contrary was the case.

As soon as I submitted the subject to Mr. Cromwell he at once stated that this draft was incorrect and did not conform to the vote, nor to the bill of Mr. Markel which had been acted upon by the board. The secretary, with the approval of counsel, has prepared the minute in the form attached, and which will be presented in due course at the next meeting of the board as a part of the minutes of the last meeting.

You will note that there were two relations with Mr. Markel; one was under the written contract of September 7 for feeding, housing, etc. This relation was terminated by the company as a right under the powers reserved to it by the contract. The other relation is that of an expert who, at the request of the company, furnished valuable advice and service, of which the company has availed of to its profit. I do not hesitate to give my opinion that in utilizing the advice, special plans, experience, and assistance of Mr. Markel the company has saved several times the amount of his bill, for the subject is a novel one, and Mr. Markel furnished experience and advice invaluable and which can not be duplicated.

Complying with the request of your favors of the 20th, you will notice a copy of the letter of Mr. Wallace is embodied in the minutes, and I inclose you a copy of the account of Mr. Markel for disbursements.

Very truly, yours,

T. P. SHONTS, *President.*

[Extract from minutes of the meeting of the board of directors of the Panama Railroad held November 8, 1905.]

Board, lodging, etc., of employees.

The president advised the board that the subject of boarding and housing employees had been taken up on the Isthmus in March last by Vice-President and General Manager Wallace under the following letter to Mr. Jacob E. Markel, of Omaha.

NOTE.—This letter appears hereafter in connection with the report of an interview with Mr. Markel which forms part of this statement.

The president further stated that upon the occasion of his first visit to the Isthmus, in July, 1905, he had found Mr. Markel there at work on this subject under the above-mentioned letter, and that he, with the other officers on the Isthmus, were deeply impressed with the urgent necessity of immediately furnishing adequate boarding and housing facilities for employees, in order to advantageously progress with canal construction; that upon his return to the United States from the Isthmus he had caused specifications to be prepared and bids invited for a contract, and, after

certain formalities, had awarded the contract to Mr. Jacob E. Markel, whose proposal was considered the most satisfactory and favorable offer received by the company in competition with other concerns; that the contract was executed and exchanged under date of September 7, 1905, and that it contained an express reservation of the right to the company to cancel the contract if found by it unsatisfactory.

The president further reported that before the said contract came into practical operation he and the other officers of the company had, upon the occasion of his last visit to the Isthmus, found that, with the aid of the advice and suggestions already given by Mr. Markel, much improvement had been made in the method of feeding and housing employees, and that the officers, becoming satisfied that the company could itself perform the work, determined that it was to the interest of the company to exercise the right reserved to it for the abrogation of the contract; that accordingly, and while on the Isthmus, and before the contract came into operation, notice of abrogation was given, as of right, to Mr. Markel, and that the contract by such notice became terminated.

Upon motion the action of the president above reported was unanimously approved.

BILL OF J. E. MARKEL.

The Bill of Mr. Jacob E. Markel was submitted as follows:

"Panama Railroad Company to Mr. Jacob E. Markel, Dr.

"OMAHA, NEBR.

"November 11, 1905.—For services of myself and assistants from March, 1905, to October, 1905, in attendance on the Isthmus at the request of Chief Engineer Wallace (March, 1905), and examination and advice at his request and that of Governor Magoon and Chairman Shonts successively as to the best method of feeding and housing employees, and of installing refrigerator, laundry, bakery, and other like plants and in the erection of hotels, establishment of labor camps for the care of the employees, etc.

"To this work over six months' time was devoted by myself and assistants in several visits to the Isthmus; in practical study of the conditions there; in traveling to various points of the United States and conferring with many representatives of and experts in commissary supplies and labor; in preparing and furnishing the company preliminary plans for the above purposes and advising as to their practical organization and installation.

"In furnishing to the company the expert knowledge, experience, and data gained by myself in forty years' continuous connection with these subjects, as well as the service and experience of a number of assistants in my organization, and giving to the company the full benefit of the experience, data, and good will of my old established organization, embracing many branches and many thousands of employees.

"My plans and advice have been largely adopted and are now in use by the company.

"In the foregoing I have actually expended the sum of \$5,745.97."

The president stated that Mr. Markel had requested the board to indicate the amount which it considered to be the fair and reasonable value of such services, with expenditures, and that Mr. Markel considered that the same were worth at least \$11,745.97, and requested payment of that amount.

The president further reported that Mr. Markel had, at the request originally of Vice-President and General Manager Wallace and subsequently of other officers of the company, rendered the services mentioned in the bill; that the company had received the benefit of such expert advice and services and had used and availed of the same in its plans and preparations for erecting a permanent plant for refrigeration; for hotels for housing and feeding employees; and for the establishment of labor camps, plants, etc., for the care of employees, and that he considered the same of value to the company of upward of \$10,000.

On motion, it was unanimously

Resolved, That in the judgment of the board the sum of \$10,745.97 is the fair and reasonable value of the services, expert advice, and expenditures embraced in the account rendered by Mr. J. E. Markel, and the same is audited and allowed at said sum.

Expense account of J. E. Markel.

Cash expended by J. E. Markel, P. L. Markel, and secretary, traveling expenses, etc., up to September 19, 1905.....	\$1,550.00	
Railroad fares, hotel bills, and traveling expenses of J. E. Markel and secretary, September 19 to October 19, 1905.....	290.35	
Paid Panama Railroad Company for four tickets, New York to Colon and return.....	160.00	
Expense of L. B. Wadleigh (my partner), paid for railroad fare, hotel bill, and other expenses.....	209.10	
Rent of New York office and settlement of cancellation of lease which expired May 1, 1906.....	211.80	
Tables, chairs, and miscellaneous expenses incurred in establishment of New York office.....	49.22	
Coupon books for use on Isthmus, worthless for other purposes.....	160.00	
Canned goods shipped to the Isthmus, order for those goods delivered to Mr. Walker, traffic manager for Panama Railroad Company.....	\$32.20	
Freight paid.....	3.00	
		35.20
Cost of settlement for premium on guaranty bond \$100,000, railway, hotel, and other expenses, J. E. Markel and L. B. Wadleigh.....		152.00
Paid employees:		
G. T. Porter—		
Salary.....	00.00	
Expenses.....	74.45	
		74.45
G. W. Clinton—		
Salary from September 20 to October 14, inclusive, at \$4.16 per day.....	99.84	
Room and board, September 20 to October 14.....	36.00	
Railway ticket, Leavenworth, Kans., to New York and return.....	65.00	
		200.84
C. E. Hutschler—		
Salary from September 19 to October 8, 19 days, at \$4.16.....	79.04	
Room and board, 19 days, at \$1.50.....	28.50	
Railway fare, Omaha to New York.....	32.50	
		140.04
J. H. Hayes—		
Salary from September 19 to October 13.....	50.00	
Room and board, 30 days, at \$1.50 per day.....	45.00	
Railway fare, Omaha to New York.....	4.65	
Railway fare, New York to Omaha.....	32.50	
		132.15
E. B. Mooney—		
Salary from September 19 to October 15, 26 days, at \$4.16.....	108.16	
Room and board, 26 days, at \$1.50 per day.....	39.00	
Railway fare from Omaha to New York.....	32.50	
		179.66
C. E. Taylor—		
Salary, September 19 to 28, 10 days, at \$8.32.....	83.20	
Railway fare, Chicago to New York.....	20.00	
Sleeping car.....	5.00	
Meals.....	22.95	
Room.....	17.00	
Incidentals.....	22.35	
		170.50
J. D. Howe—		
Settlement of salary contract for one year, at \$5,000 per annum.....	1,000.00	
Expenses.....	146.05	
		1,146.05

Paid employees—Continued.

W. B. Millard—		
Salary	\$250.00	
Expenses	138.92	
		\$388.92
F. D. Elmer—		
Salary, September 23 to October 17, at \$75, and expenses, expense being \$15.94		78.44
I. L. Miller—		
Salary, September 19 to November 1, 42 days, at \$2.50 ..	105.00	
Expenses	69.25	
Railway fare, Omaha to New York and return	65.00	
		239.25
Jay Burns—		
Salary, October 5 to 17, 13 days, at \$5	65.00	
Expenses	113.00	
		178.00
Total		5,745.97

THE MARKEL CONTRACT.

This agreement, entered into this 7th day of September, A. D. 1905, between the Panama Railroad Company, a corporation organized and existing under and by virtue of the laws of the State of New York, hereinafter referred to as the Railroad Company, and Jacob E. Markel, of Omaha, Nebr., hereinafter referred to as the Contractor, witnesseth that:

Whereas the Railroad Company will have a large number of men in its employ at various places along said line, and the Isthmian Canal Commission will have a large number of employees at work along said line or contiguous thereto;

And whereas such men employed on such work require board and lodging while so employed;

And whereas it is thought that the comfort and convenience of such employees will be insured by providing facilities at the several points where such work is being prosecuted for boarding and lodging and furnishing of supplies to such men as shall see fit to avail themselves of the facilities hereinafter provided for;

Now, therefore, for and in consideration of the covenants and agreements hereinafter set forth to be by the respective parties hereafter kept, done, and performed, it is agreed as follows, to wit:

The Railroad Company shall furnish the Contractor all necessary hotel and camp buildings at such points as it may designate, and shall maintain same. It shall equip and deliver to the Contractor, and the Contractor shall maintain during the continuance of this agreement, all necessary furniture, bedding, tableware, tinware, cutlery, ranges, refrigerators, cooking utensils, and other equipment ordinarily needed in the operation of such hotels and camps.

The Railroad Company shall charge the Contractor the following rates per hundred pounds for transportation of supplies from New York to Colon, which rates shall cover delivery of the supplies in the refrigerating plant or storeroom to be provided at that point:

For articles requiring refrigeration, 57½ cents.

For articles not requiring refrigeration, 22½ cents.

On articles requiring freezing and storage in refrigerating plant at Colon it shall charge the Contractor 40 cents per hundred pounds, which charge shall cover the cost of freezing and of storage in the refrigerating plant at Colon, regardless of the length of time such articles remain in storage, not to exceed thirty days.

The Railroad Company shall furnish, maintain, and operate such refrigerating plant and shall assign to the Contractor such room or rooms therein as may be necessary from time to time for the storage of his supplies requiring refrigeration. The Contractor shall have the right to employ his own men at such refrigerating plant for the purpose of preparing his supplies for shipment to the hotels and camps operated by him under this agreement, and shall hold the Railroad Company harmless of all acts of his agents or employees which shall be or may become harmful or detrimental to the operation of the remainder of said plant by said Railroad Company. The Contractor shall also hold the Railroad Company harmless on account of all acts of his agents and employees resulting in damage to the supplies or other property of the Contractor.

For all articles not requiring freezing or storage in refrigerating plant at Colon the Railroad Company shall furnish the Contractor storage room, and shall also furnish the Contractor room to be occupied by himself and force for general office purposes,

and shall charge the Contractor as rent for such storage and office room 5 per cent per annum upon the cost of such portion of the building as is so occupied, such estimate and allotment to be made by the general manager of the Railroad Company. The Contractor shall also pay the Railroad Company such reasonable amount per annum to cover depreciation of such portion of the building as is so occupied by him as shall be fixed by the general manager of the Railroad Company.

The Railroad Company shall be responsible to the Contractor for his supplies while in such refrigerating plant and storage room and for the proper refrigeration of such supplies as require refrigeration. If, in case of loss or damage to the supplies of the Contractor, on other supplies, while in such refrigerating plant or storage room, the responsibility for such loss or damage can not be definitely fixed, the amount of such loss or damage shall be divided equally between the Railroad Company and the Contractor.

The Railroad Company shall furnish and haul on such trains as may be designated by the general manager of the Railroad Company such refrigerator and other cars as may be required by the Contractor for the distribution of his supplies from the refrigerating plant and storage room at Colon to the stations nearest the hotels and camps operated by him under this agreement, and for transporting to Colon or other points any supplies which the Contractor may need to send to such points from such hotels and camps or from other stations on the railroad. It shall charge the Contractor for such service in either or both directions an amount per day per car used, which shall be fixed by the general manager of the Railroad Company. The Contractor shall furnish his own employees for handling such supplies on such cars and to and from such cars. At points where the Railroad Company shall have facilities for handling supplies from the railroad to the hotels and camps the Railroad Company shall allow the use of such facilities to the Contractor.

The Railroad Company shall furnish and maintain buildings at Colon for use as laundry and bakery and shall equip same with necessary laundry and bakery machinery and tools. Such equipment shall be maintained by the Contractor during the continuance of this agreement. The Railroad Company shall charge the Contractor as rent for such laundry and bakery buildings 5 per cent per annum upon the cost of such buildings, such cost to be determined by the general manager of the Railroad Company, and the Contractor shall also pay the Railroad Company such reasonable amount per annum to cover depreciation of such buildings as shall be fixed by the general manager of the Railroad Company.

The Railroad Company shall furnish the Contractor necessary supply of water at such hotels, camp buildings, and storerooms without charge.

The Railroad Company shall furnish the Contractor f. o. b. cars on track at stations at such hotels, camp buildings, and storerooms a good grade of bituminous coal at six dollars (\$6) per net ton.

Electric light shall be furnished the Contractor at cost by the Railroad Company for use in such hotels, camps, storehouses, etc., at points where electric-light plants are operated by the Railroad Company or the Isthmian Canal Commission.

The Railroad Company shall furnish the Contractor at cost such ice as may be required by him for actual use at the hotels, camps, and storehouses operated by him under this agreement.

The Railroad Company shall furnish the Contractor transportation on its steamship line, New York to Colon, and on its railroad from Colon to their destination, for his employees at the same rate as it charges the employees of the Isthmian Canal Commission for like service, and shall grant his employees the same rate for return trip to New York as is granted to the employees of such Commission.

The Railroad Company shall deduct from the wages of its employees and pay to the Contractor such amounts as may be due him by such employees for care of room, board, or supplies furnished them by him, and shall arrange to have the Isthmian Canal Commission deduct from the wages of its employees and pay to him such amounts as may be due him by them for room, board, or supplies furnished them by him.

The Railroad Company shall grant to the Contractor and his employees the same hospital privileges enjoyed by its own employees.

The Railroad Company shall grant to the Contractor the free use of its telegraph and telephone lines for the transmission of such messages as are necessary in connection with the operation of the hotels and camps covered by this agreement.

The Railroad Company shall furnish the Contractor without charge a suitable house for occupancy by himself and family.

The Contractor shall furnish the Railroad Company a corporate bond satisfactory to the president of the Railroad Company in the sum of one hundred thousand dollars (\$100,000) to insure the faithful performance of his obligations under this agreement.

The Contractor shall at all times keep the hotels, camp buildings, and storerooms covered by this agreement, and the premises surrounding same, as well as the furniture, bedding, tableware, tinware, cutlery, ranges, refrigerators, cooking utensils, and other equipment used in and about such buildings, in a cleanly and sanitary condition, and shall at all times keep the hotels, camp, and storerooms covered by this agreement open to the inspection of the general manager of the Railroad Company, or such representatives as he may designate, and shall at all times operate the hotels and camps covered by this agreement to the satisfaction of the general manager of the Railroad Company.

The Contractor shall not employ in or about such hotels, camps, or storerooms any person who is or may be objectionable to the Railroad Company, and shall, upon the request of the Railroad Company, discharge such objectionable employee or employees.

The Contractor shall furnish such employees of the Railroad Company and the Isthmian Canal Commission as are paid by the Railroad Company and the Isthmian Canal Commission in gold and their families, meals, maintenance, and care of rooms at the following rates:

	Gold.
Maintenance and care of rooms per month per person over 12 years of age.	\$6. 00
Maintenance and care of rooms per month per person over 5 years and under 12 years of age	No charge.
Maintenance and care of rooms per day per person over 12 years of age ..	. 20
Maintenance and care of rooms per day per person over 5 and under 12 years of age	No charge.
Meals per month per person over 12 years of age	30. 00
Meals per month per person over 5 and under 12 years of age	10. 00
Meals per day per person over 12 years of age	1. 00
Meals per day per person over 5 and under 12 years of age .....	. 40
Meals per meal per person over 12 years of age .....	. 33 $\frac{1}{3}$
Meals per meal per person over 5 and under 12 years of age .....	. 13

In case any employee or person covered by above classifications, who shall have board and lodging, or either, at a monthly rate, shall be necessarily absent for a period not less than seven (7) consecutive days in any one month, such person shall be furnished board and lodging, or either, at the monthly, and not the per diem, rate, for the balance of such month.

Any employee, or other person, in above classification, will be furnished an identification card, on request to the Contractor, which will enable the holder to obtain board and lodging, or single meals, at the monthly or daily rate he has contracted for, at any hotel or camp operated by the Contractor.

The meals furnished such gold employees and their families shall consist of the following articles and shall be sufficient in amount to satisfy their appetites:

Breakfast.—Fruit, cereal, meat or eggs, one vegetable, bread and butter, coffee or tea.

Dinner.—Soup, fish, fresh meat, entrée, two vegetables, bread and butter, pie or pudding, coffee or tea.

Supper.—Cereal, fish, meat or eggs, fruit sauce or preserves, bread and butter, cake coffee or tea.

The contractor shall furnish such employees of the Railroad Company and the Isthmian Canal Commission as are paid by the Railroad Company and the Isthmian Canal Commission in silver, and their families, meals at the following prices:

	Gold.
Meals per month per person over 12 years of age	\$12. 00
Meals per month per person over 5 and under 12 years of age	5. 00
Meals per day per person over 12 years of age .....	. 45
Meals per day per person over 5 and under 12 years of age .....	. 20
Meals per meal per person over 12 years of age .....	. 15
Meals per meal per person over 5 and under 12 years of age .....	. 10

In case any employee or person covered by above classification who shall have board and lodging, or either, at a monthly rate shall be necessarily absent for a period not less than seven (7) consecutive days in any one month, such person shall be furnished board and lodging, or either, at the monthly, and not the per diem, rate for the balance of each month.

The meals furnished such silver employees and their families shall consist of the following, and shall be of sufficient amount to satisfy their appetites:

Breakfast.—Cereal, fish, bread and butter, coffee or tea.

Dinner.—Soup, meat or fish, two vegetables, bread and butter, pie or pudding, coffee or tea.

Supper.—One meat, consisting of beef, mutton, or pork, one vegetable, consisting of beans, yams, or yucca, bread and butter, sauce or sirup, coffee or tea.

It is the understanding that the menus outlined above for both gold and silver employees are simply examples of the meals that will be required, and that such frequent changes in the menus will be made as will give such employees proper variety of food.

The Contractor shall furnish, at his own expense, all of the provisions and supplies in such hotels and camps, and shall also furnish, at his own expense, all of the cooks, waiters, chambermaids, and other employees required by him in connection with the operation of the hotels and camps covered by this agreement.

The Contractor shall be permitted to sell at the hotels operated by him under this agreement, at such prices as may be considered reasonable by the general manager of the Railroad Company, newspapers, periodicals, books, and such other articles as are usually sold at news stands in hotels, as well as soft drinks, light wines, beer, cigars, cigarettes, and tobacco.

The Contractor shall be permitted and required to keep on hand at the camps operated by him under this agreement, for sale to employees of the Railroad Company and the Isthmian Canal Commission, supplies and provisions, cooked or uncooked, to be sold to such employees at such prices as may be considered reasonable by the general manager of the Railroad Company.

The Contractor shall be permitted to do laundry work in the laundry building provided for in this agreement for employees of the Railroad Company and Isthmian Canal Commission and their families, and shall make such reasonable charges as shall be satisfactory to the general manager of the Railroad Company.

In consideration of free transportation of the Contractor and his employees where the same shall be furnished, the Contractor shall hold harmless the Railroad Company from and against all claims, demands, suits, judgments, costs, or payments of money of any nature or kind whatever arising out of personal injuries to or death of said Contractor or his employees while being transported over the steamship and railroad lines of said Railroad Company under the terms of this agreement.

The Contractor shall use every precaution to prevent damage by fire to the buildings and other property of the Railroad Company.

In the event that the Contractor shall not perform his obligations under this agreement to the satisfaction of the general manager of the Railroad Company, the Railroad Company shall have the right to cancel this agreement at any time upon giving thirty days' notice to the Contractor of such desire upon its part.

If the Railroad Company elects to cancel this agreement at any time for the reason stated, the Railroad Company shall purchase from the Contractor such supplies and provisions as he may have on hand at the storerooms, hotels, or camps, or in transit at cost price.

Upon the termination of this agreement the Contractor shall turn over to the Railroad Company the buildings, furniture, bedding, tableware, tinware, cutlery, ranges, refrigerators, cooking utensils, and all other equipment furnished him under this agreement by the Railroad Company in the same condition as when received by him from the Railroad Company, reasonable or ordinary wear and tear excepted.

This agreement shall take effect on the 7th day of September, A. D. 1905, and shall continue for the term of five years from such date.

The Contractor shall not have the right to transfer this agreement or sublet any buildings or premises covered by it to any other individual, firm, or corporation without the written consent of the president of the Railroad Company.

This contract vests in the Contractor exclusive rights in the matters herein provided for during the continuance of this agreement.

Witness the signatures and seals of the parties hereto, thereto duly authorized to this and a duplicate instrument of like tenor and effect the day and year first above written.

Attest:

T. H. ROSSBOTTOM,
First Assistant Secretary.

Witnesses:

C. W. ELMER,
D. W. ROSS.

[SEAL.]

PANAMA RAILROAD COMPANY,
By T. P. SHONTS. [SEAL.]
As President.
JACOB E. MARKEL,
Contractor.

**EXAMINATION OF MR. JACOB E. MARKEL BY THE SECRETARY
OF WAR, IN WASHINGTON, ON DECEMBER 31, 1905.**

Secretary TAFT. I want to ask your full name, Mr. Markel.

Mr. MARKEL. My full name is Jacob E. Markel.

Secretary TAFT. What has been your life's work and business?

Mr. MARKEL. Operating hotels, eating houses, boarding camps, and boarding trains.

Secretary TAFT. How long have you been engaged in that business?

Mr. MARKEL. Fifty years.

Secretary TAFT. Can you give me some idea of the largeness of the enterprises that you have been engaged in?

Mr. MARKEL. Yes, sir. I have been in the business all my life. I am a baker by trade—have served my time at the bakery. Beginning with the reconstruction of the Union Pacific I had charge of all their eating houses.

Secretary TAFT. Under Mr. Burt?

Mr. MARKEL. Yes, sir. I had charge of all their eating houses, lunch counters, and hotels—19 in number—when the reconstruction of the road began. The operation of the boarding trains and boarding camps was turned over to me, and at one time I had 78.

Secretary TAFT. And how many persons did you have a day on an average?

Mr. MARKEL. I fed on an average of 3,000 people on the construction train, at the hotels, and eating houses, etc. At one time I was serving on an average of 15,000 meals a day. Besides that and at that time I had hotels and eating houses and boarding trains on the Kansas City Southern.

Secretary TAFT. Was that under construction at that time?

Mr. MARKEL. It was under reconstruction. There were 9 of the eating houses and 22 boarding outfits.

Secretary TAFT. So that your profession has made you entirely familiar with the details of the business of feeding large numbers of men engaged in works of construction?

Mr. MARKEL. Yes, sir. It has been my life's work.

Secretary TAFT. Do you know of anybody who has had more experience than you in this business in this country?

Mr. MARKEL. I do not. I think the Harvey people on the Santa Fe have had like experience as far as hotels and eating houses are concerned.

Secretary TAFT. Have they attempted to feed boarding camps?

Mr. MARKEL. No, sir.

Secretary TAFT. I suppose that is a somewhat different task from that of feeding at restaurants and hotels the eating public or the travelers along lines of first-class travel.

Mr. MARKEL. Yes, sir. At the same time, Mr. Secretary, I was operating the Millard Hotel at Omaha, a house of 200 rooms, and the Lincoln Hotel at Lincoln, Nebr., a house of 160 rooms.

Secretary TAFT. Now I find in the record which is sent me a letter marked "Personal," dated March 4, 1905, a letter purporting to be written by John F. Wallace, then chief engineer of the Canal Commission, to you, addressed "Omaha National Bank, Omaha, Nebr." Do you remember receiving that letter?

Mr. MARKEL. Yes, sir.

Secretary TAFT. Did you send an answer to it?

Mr. MARKEL. Yes, sir.

Secretary TAFT. Can you give me the answer?

Mr. MARKEL. Yes, sir.

Secretary TAFT. Have you it with you?

Mr. MARKEL. I think I have it in my trunk. If I have not, I can get it for you.

Secretary TAFT. I will be glad if you can let me have the answer.

Mr. MARKEL. Let me explain that letter. The real answer to that letter was a verbal one. Mr. Wallace wrote me on that date from the Isthmus and misdirected his letter. I knew nothing of the letter until the latter part of April, when I accidentally met Mr. Wallace in his son's office in Chicago. He immediately, as they say out West, got on my neck for not answering his letter. I was entirely in the dark, and told him I did not receive any letter. He was in a great hurry, but gave me a little detail of what the letter contained, and said, "Now, will you go to the Isthmus and investigate this matter?" I told him that I would let him know the next day. I immediately took the matter up with the other half of my family, and I met him the next day at the Union League Club in Chicago and had a talk with him of a very few minutes, and told him that I would go and investigate it anyway. But I said, "Now, you know I am engaged here with the Illinois Central." They had asked me to come to Chicago, as they had every year, and bring an outfit to take care of 3,000 men, and I had the outfit there in cars ready for service.

Secretary TAFT. Mr. Wallace you had known for a good many years in connection with your business?

Mr. MARKEL. Yes, sir. I had done the same thing for him in the construction of the Fort Dodge and Omaha line.

Secretary TAFT. When he was chief engineer of that road?

Mr. MARKEL. Yes, sir. Afterwards he was general manager, but at that time I had taken care of nearly 3,000 men for him in the dead of winter, and an Iowa winter, too.

Secretary TAFT. Was that a branch of the Illinois Central?

Mr. MARKEL. It was the main line of the Illinois Central from Chicago to Omaha. Now, the Illinois Central ran to Fort Dodge, and from Fort Dodge to Sioux City. About five years ago they constructed a line from Fort Dodge to Omaha.

Secretary TAFT. And it was in the construction of that line that you became acquainted with Mr. Wallace?

Mr. MARKEL. Yes, sir. I had done the thing for him in other places. I told him that as soon as the Illinois Central would let go of me I would go to the Isthmus. He arranged the usual fare that prevailed as an employee of the canal. It was the \$25 rate, I think, from New York to Colon. The Illinois Central held me until the 1st of June, but

I got away without leaving them in the lurch, which I would not do. Mr. Wallace went to the Isthmus about the middle of May with Governor Magoon. I think it was the 10th or 11th of June; somewhere about that time. I can tell from my records just when. I went to New York to go to the Isthmus. On my arrival in New York, or on my way, I noticed in the papers that Mr. Wallace had left the Isthmus, and he got into New York the same time I did. I met him the next morning, which was Friday, and had a talk with him. I said: "Now I am on my way to the Isthmus," and he insisted that I go on and carry out our understanding and agreement, which I did.

Secretary TAFT. Just what was that understanding and agreement? What did you understand it to be?

Mr. MARKEL. I understood that he was to go down there, and I expected to meet him there and look the ground over and make such suggestions as I thought were best for the organization of a commissary department, a scheme to take care of the white people, or gold roll, as well as the silver-roll people.

Secretary TAFT. When did you get this letter?

Mr. MARKEL. I got that letter about the 1st of June. Now when Mr. Wallace returned to Washington, after my interview with him in Chicago, he found this letter returned to his office from the Dead Letter Office. He turned it over to his private secretary, and the private secretary instead of directing it to me at Omaha directed it care of the Union Pacific, 120 Broadway, New York, care of T. M. Orr—that is, the secretary in Omaha. It went to New York and they forwarded it to Omaha.

Secretary TAFT. And you got it about the 1st of June?

Mr. MARKEL. Yes, sir.

Secretary TAFT. Now, did you answer it?

Mr. MARKEL. I think I did. I know I had answered it in my verbal conversation with him and in our arrangement for transportation.

Secretary TAFT. Do you think you answered it by letter?

Mr. MARKEL. I think I did.

Secretary TAFT. If you have that letter, will you let me have a copy of it?

Mr. MARKEL. I will be glad to let you have a copy.

Secretary TAFT. I would be glad to have you go right on with what you were saying.

Mr. MARKEL. I went on to the Isthmus, and had my son with me, who is my partner, and also had my private secretary.

Secretary TAFT. What is his name?

Mr. MARKEL. Prior L. Markel.

Secretary TAFT. How long did you stay on the Isthmus?

Mr. MARKEL. I was there a month, lacking a very few days. I arrived on the Isthmus on July 6 and I left the Isthmus August 1.

Secretary TAFT. While you were there what did you do?

Mr. MARKEL. I went over the road several times and got the lay of the railroad as compared with the route of the canal in my head. I got the situation of the houses that were there and those that had been put up, but were then not completed, and formed in my own mind just what ought to be done.

Secretary TAFT. I suppose what you were interested in chiefly was locating the camps.

Mr. MARKEL. Yes, sir; along the line of the canal, as they ought to be.

Secretary TAFT. Also for reference to the ease of transportation of supplies over the railroad?

Mr. MARKEL. Yes, sir; and quick service.

Secretary TAFT. Did you make any investigation as to the location of refrigerating plants?

Mr. MARKEL. Yes, sir.

Secretary TAFT. What did you do as to that?

Mr. MARKEL. Before going to the Isthmus I freshened my mind up a little as far as refrigerating, laundry, and bakery plants are concerned. I have had a good deal of experience in these things, but I called to my aid Armour & Company's expert chief engineer. I first went to Armour, who is an acquaintance of mine.

Secretary TAFT. Was this before you went down to the Isthmus?

Mr. MARKEL. Yes, sir; it was before I went to the Isthmus. I wanted to prepare myself with information that could be applied to a hot country. The Armour people got up a little sketch of a plant, and through them I got figures on the plant. Through the American Laundry and Machinery Company I got figures and blueprints of a laundry plant, and through other houses information in regard to a bakery. I took all this information with me to the Isthmus, and when investigating the matter I had those things in mind. My theory was that there should be established at Colon a refrigerating and freezing plant that would take care of at least 200,000 pounds of fresh material, meats, butter, eggs, etc., and should make at least 50 tons of ice per day, and that there should be a laundry capable of turning out from 10,000 to 20,000 pieces a day and a bakery that would produce all the way from 5,000 to 20,000 loaves of bread a day, as the need would be.

After going over the ground thoroughly, not only in the train, but on foot, and investigating it for about three weeks, I said to Governor Magoon: "Now I have an idea of what ought to be done here. I presume I should report to Mr. Wallace." In the meantime we had the information that he had left the service of the Government, and the governor suggested that I write him and that I make up a statement or report of my ideas of what ought to be done, which I did.

Secretary TAFT. Have you that report?

Mr. MARKEL. I think it is in that correspondence [pointing to the correspondence which the Secretary had before him].

Secretary TAFT. I have not seen it. I don't think it has been submitted to me.

Mr. MARKEL. If it has not I can give you a copy of it.

Secretary TAFT. I wish you would. I wish to have your letter to Mr. Wallace in answer to his letter to you of March 4, delayed until June 1, and a copy of the letter to Governor Magoon.

Mr. MARKEL. I shall be glad to send them to you.

Secretary TAFT. You may go right on.

Mr. MARKEL. I gave the Governor that letter, and I think—I don't know—he cabled the gist of it to this country. I had said to him in the meantime, "Now, I have remained here as long as it is necessary, and had I not better take a letter from you and return to the States, and take this matter up with Mr. Shonts?" He said, "I will cable the gist of this and find out whether Mr. Shonts is coming here or not."

We had expected him to come, but had no information. Governor Magoon cabled to the States, and the same day we got a reply that Mr. Shonts had left that day for the Isthmus, he and Mr. Stevens, and suggested that I remain there, which I did. On the arrival of Mr. Shonts and Mr. Stevens, one of the first things that came up was the necessity for better commissary arrangements for the employees, and we had several meetings. By the way, that is the first time I had ever met Mr. Shonts. I had known Mr. Stevens on the Rock Island and had done some boarding-house business for him, especially at Moline, Ill., where they were constructing some large shops. I had a large boarding house in there for him.

There were a good many other matters that were claiming their attention and this was a little bit new to them, and it was finally decided that if anything was done it would be necessary for me to return to the States, because I would have to look after the details of the proposition. So I returned after being with them about a week. I returned to New York. On my arrival there I had a cablegram from Mr. Shonts saying that he would be in New York the 14th of August and would then be in a position to discuss the commissary matter with me. I remained in New York until he arrived, and on his arrival it was agreed that I should let him hear in a week from that time, which I did. He had gone home in the meantime, and was laid up with boils. So I met him in New York on his way here and I returned to Washington.

In the meantime Mr. Shonts had taken the matter up with the Swift people, they being one of the greatest users of refrigeration, and they in turn had turned over to him a Mr. Gardner, who was their chief engineer and refrigerator expert. Mr. Gardner came on to New York, and Mr. Smith was with me, the Armour chief engineer, and we all came to Washington and got up the details and the blueprints—all the information necessary for the refrigerator plant. Mr. Alworck (?), the chief engineer of the Panama Railroad, was here. Those three, with what assistance I could give them, got up the details, and afterwards, in connection with Mr. Alworck, I assisted him in the details of the laundry plant and the bakery plant. Those were submitted to Mr. Shonts, and adopted by him, I believe, and the matter of a contract was taken up.

Secretary TAFT. Do you know whether those things on the Isthmus have been erected or are in process of erection?

Mr. MARKEL. They are in process and ought to be completed by this time. It was found that to get up the permanent plant it would take from five to six months. It was then decided that a temporary plant must be put up at once, and in connection with Mr. Alworck and Mr. Smith and Mr. Gardner a temporary plant was planned, the machinery bought, and instructions given to put up the building, and I should think is now in operation. I don't know but that they were working on it when I was at the Isthmus in October. The machinery was all there.

Secretary TAFT. You said the matter of a contract was taken up. Now, how was the matter of contract taken up?

Mr. MARKEL. Mr. Shonts got up a specification of what the requirements would be, and those were sent to me and to other people in New York and elsewhere as far as I know.

Secretary TAFT. They were advertised, were they not?

Mr. MARKEL. Yes, sir. I don't know whether there was a paper advertisement or not. I know I had a copy.

Secretary TAFT. You knew there were other bidders?

Mr. MARKEL. Yes, sir.

Secretary TAFT. How long was it after you got back before the bids were invited from you—I mean, a bid was invited from you?

Mr. MARKEL. After I got back from the Isthmus. I would say a month.

Secretary TAFT. The contract was signed on the 7th of September. You said that you returned on the 14th of August.

Mr. MARKEL. I left the 1st of August and returned here the 8th of August.

Secretary TAFT. And Mr. Shonts returned to New York on the 14th of August?

Mr. MARKEL. Yes, sir.

Secretary TAFT. And that after that you had these interviews with the chief engineer of Swift & Company and the Armour people in connection with Mr. Shonts and the engineer of the railroad company?

Mr. MARKEL. Yes, sir.

Secretary TAFT. And then they made the plans for the plant at Colon and along the road, which were to be leased on contract, or which were to be turned over to the contractor as the instrument with which he was to supply the meals?

Mr. MARKEL. Yes, sir.

Secretary TAFT. As I understand the contract, the railroad company was to furnish you, or whoever assumed the contract, the complete plant, including the kitchen utensils and plates and everything that went to make up the equipment of such an establishment. All that you were to furnish or that the contractor was to furnish was the employees and the food?

Mr. MARKEL. Yes, sir.

Secretary TAFT. The plant was to remain the property of the railroad company, to be used by you—to be turned over to them, wear and tear excepted, in good condition?

Mr. MARKEL. Yes, sir; that was the understanding, and for the use of such plant a certain sum was to be paid by the contractor, which appears in the contract.

Secretary TAFT. You were to pay a percentage?

Mr. MARKEL. I was to pay a rental value; in other words, I was to pay for the bakery, the laundry, and the refrigerating plant, such of it as was used for a storeroom, 6 per cent upon the cost of same.

Secretary TAFT. They were to charge you various things, and you on the other hand were permitted to charge certain rates to everybody who patronized you?

Mr. MARKEL. Yes, sir.

Secretary TAFT. And certain rates were to be charged you—transportation rates and so on.

Mr. MARKEL. Yes, sir. Certain things were to be done by the contractor. For instance, the contractor was to keep the buildings absolutely sanitary and clean, and the surroundings adjacent to the building.

Secretary TAFT. And the employees were subject to discharge by the railroad company?

Mr. MARKEL. Yes, sir.

REPORT OF THE ISTHMIAN CANAL COMMISSION.

3.3

Secretary TAFT. And the contractor was to hold the railroad company harmless for any accidents or cost in any way arising from what the contractor did, or from anything that the railroad company did themselves?

Mr. MARKEL. Yes, sir.

Secretary TAFT. With reference to the contractor's employees?

Mr. MARKEL. Yes, sir.

Secretary TAFT. We get down to the 7th of September, when the contract was signed. It was awarded to you before that, I suppose, and subsequently drawn up?

Mr. MARKEL. I think that was the day it was awarded; that is my recollection—the 7th of September.

Secretary TAFT. Then you modified that contract in New York?

Mr. MARKEL. Yes, sir; I modified it in Chicago. Immediately on signing the contract I left for the West, and when I got to Chicago I had a telegram from Mr. Shonts, saying that Mr. Stevens objected to some of the provisions in the contract as it had been cabled him, as he suggested that there be three divisions of the cost in the gold roll and the silver roll instead of two; or, in other words, that if the gold-roll people wanted a cheaper meal than was contemplated in the contract the contractor was to furnish the same.

Secretary TAFT. Was that modification introduced?

Mr. MARKEL. It was. I answered the message by saying that I would meet the views of Mr. Stevens and Mr. Shonts in any modification that seemed just to them.

Secretary TAFT. But there was a still further modification, was there not? What did you do after you went to Chicago?

Mr. MARKEL. I went on home and prepared myself, and went to New York.

Secretary TAFT. Let me go back. You said that you took your son with you.

Mr. MARKEL. Yes, sir.

Secretary TAFT. Did anybody else go with you to Panama?

Mr. MARKEL. Only my private secretary—a man by the name of McLaughlin.

Secretary TAFT. He was in your employ regularly, then?

Mr. MARKEL. He had been in my employ a good many years. I employed him for this purpose. A year before this he had gone to Iowa and was one of the court reporters there.

Secretary TAFT. And you asked him to go with you to the Isthmus?

Mr. MARKEL. Yes, sir; for the purpose of acting as private secretary.

Secretary TAFT. Was there any further modification of the contract when you returned to New York? Did you not modify the contract again?

Mr. MARKEL. Yes, sir. When I went to New York, I had with me 12 of my best people. We expected to leave New York September 23 to take over the hotel at Corozal and Culebra, as Mr. Shonts told me that they were having a tough time of it down there, and to take those houses up just as quick as I could, and I arranged it that way, and, as I told you, I went there, expecting to take these men with me and take over Corozal and Culebra. On my arrival in New York the 22d, there were some very disquieting cablegrams there from the Isthmus—one from Mr. Stevens, who seriously objected to the con-

tract. He made statements that it was a well-known fact on the Isthmus that if that contract was carried out it meant a profit to the contractor of a million dollars a year, and some other statements—I don't just remember what the cablegram was.

That brought up a question in Mr. Shonts's mind, and I could see right off that if there was any opposition on the Isthmus the contract could not be carried out. Mr. Shonts sent for Mr. Cromwell. Mr. Cromwell, after reading the cablegram and talking a few minutes, said: "This contract either ought to be canceled or put in such shape that it can be canceled at any time." I said to Mr. Shonts: "This contract, Mr. Shonts, can be canceled at any time you say. Now, whatever you want done in this matter I am ready to do. I don't know what is the matter on the Isthmus. I do know that this contract is all right, but I have no objection to giving you an agreement that you can cancel at any time you see fit without any further notice. I am willing to give you that privilege," which I did in that letter [pointing to letter in possession of Secretary Taft].

Secretary TAFT. Then what happened?

Mr. MARKEL. We went to the Isthmus, leaving New York the 28th of September.

Secretary TAFT. Did you take these 12 men with you?

Mr. MARKEL. No, sir. Mr. Shonts said "we must go there and see what is the matter. I don't feel as though we should proceed any further in this until we find out," and that struck me as being correct, as it would be unfortunate if I were to go to all the expense taking those men down there and having them on the Isthmus, so I just left them in New York and went with Mr. Shonts to the Isthmus.

Secretary TAFT. You did not send them home?

Mr. MARKEL. No, sir; I held them in New York until I should reach the Isthmus and advise them differently.

Secretary TAFT. You say there were 12 of them?

Mr. MARKEL. Yes, sir.

Secretary TAFT. Then what happened when you got to the Isthmus?

Mr. MARKEL. The matter was pretty thoroughly discussed. Mr. Stevens said that he had a report from his man, Jackson Smith, who claimed that they were feeding the men and caring for them for \$25 a month—that is, the gold-roll people—and that in his judgment it was not best for the Commissioners or best for the railroad to enter in on this contract, as the men would not pay \$36 a month.

Secretary TAFT. Was \$36 a month what they would have had to pay under this contract?

Mr. MARKEL. Yes, sir.

Secretary TAFT. Was there anything said as to the silver roll?

Mr. MARKEL. Yes, sir. To begin with, in making up my figures for the price to be charged, I took my experience of forty years or more. I know pretty well the cost of material, provisions, help, and I figured the absolute cost as I saw it, adding to the cost, of course, transportation which I would have to pay, rent on the plants which I would have to pay, transportation on the Isthmus, the care of the buildings and the surroundings, transportation for the material from the depot and from the railroad depot to the houses, as most of them were quite a ways from the railroad station.

For instance, I would have to pay \$6 per ton for coal delivered at railroad station. Now, when I got to the Isthmus I found at Culebra

6 men and 6 mules that were busy transporting material to that hotel, especially coal. Those mules and those negroes were not put into the expense account of that hotel and would have had to be paid by me as contractor, and that was why I was sure that they were not taking care of those men for \$25 a month. Afterwards I went over the road, taking one of the auditors in the auditing department with me. We got up some figures, and I think it was costing them nearer \$40 than it was \$25. But there seemed to be a complication there, Mr. Secretary, that it did not seem wise to undertake to put that contract into force, because there had been so many misstatements and so much in the paper about the \$50,000,000 graft and of \$50,000,000 contract that it looked as though they could not stem the tide, and I thought perhaps there was something in that, but I was there, ready to carry out my contract as it was agreed to, as far as the gold roll was concerned.

As regards the silver roll I found they were feeding those people at about 30 cents a day instead of 40 cents, which was my bid, but they were doing it entirely different from what my contract called for me to do. In my contract the specification said I should furnish tables, dishes, cooking utensils, and that everything should be absolutely sanitary; the buildings and surroundings should be kept sanitary at the contractor's expense. The facts were they were feeding those negroes just as well as they deserved and well enough for them for 30 cents a day, but were doing it a little bit different and furnishing a different menu from what the contract called for.

Secretary TAFT. And the reason why they were furnishing it at 30 cents a day was they were not giving what you had agreed to give, but what you think is a satisfactory meal for them.

Mr. MARKEL. Yes; ample for them. I contemplated having a regular organized kitchen with steam attachments, so as to steam the dishes and everything of that kind. They had in camp down there two or three farm kettles with the stuff in, and they cooked it up and it was all right, but it was not in accordance with what was demanded of me in the specifications. I said to them, "You are all right on this silver-roll proposition; I can do that at 30 cents and make more money out of it than I could on the larger way out of 40 cents. That seems to satisfy the laborers. If you are satisfied, I can do it at 30 cents a day. It will cost me 26 cents a day, leaving me a profit to take all my chances on of 4 cents a day, and there are a good many chances. One can not figure in the loss of goods, of meat, and of other materials, especially in the hot climate, which would add from 1 to 2 cents a day per man, but that is an amount you can not absolutely get at."

Secretary TAFT. The truth is, isn't it, Mr. Markel, if you know anything about contracting in the Tropics, that all contractors who go into the Tropics in their calculations in reaching what they are willing to bid for have to insert a very much larger percentage for risk or loss due to unforeseen causes than they do in the Temperate Zone.

Mr. MARKEL. They certainly do, and in making up my figures on the white roll I figured that loss at 1 cent per meal or 3 cents a day, and I doubt very much if that would cover it.

Secretary TAFT. This does not apply alone to my experience to feeding, but it applies to every form of contract.

Mr. MARKEL. Yes, sir; every form of contract.

Secretary TAFT. Of course, the risk that Government runs in the matter can be calculated at considerable less in this, just as the Gov-

ernment insures its own property by not insuring at all. When it does a business in the Tropics and goes into this business the element of loss from such risk covering the whole enterprise may be a very small percentage, whereas in the case of one contractor whose risk is limited to that one contract the danger may be so large to him that he must calculate his risk as greater than the Government would have viewing the whole transaction.

Mr. MARKEL. Yes, sir; that is true.

Secretary TAFT. That is one of the reasons why it seems to me in the Tropics it may be better for the Government to do its own work than to contract it, because having the plant there it is able to ignore the element of risk. It does not have to anticipate, as every contractor does, the danger of loss, and so charge the Government for a loss that may not occur.

Mr. MARKEL. That is true, Mr. Secretary, but on the other hand, speaking from the contractor's standpoint, a contractor like myself who has devoted his life to this business, there are secrets in all trades, and he has a way of purchasing his stuff and certain materials, of working his men, knowing his men as he should do if he is a wise contractor, and in that way may overcome anything that would be in favor of the Government doing it themselves. I really think that a contractor can do it for less money than the Government can, but as you say, I doubt very much whether the Government can afford to contract those things in hot climates because of that percentage which the contractor is bound to insert in the prices he fixes, but I do know, Mr. Secretary, from the contractor's standpoint, that the prices bid by me on the Isthmus were as near right as it is possible to be done, because I gave it my best thought for months.

It takes so many pounds of meat and so many pounds of bread and of sugar and of everything else to feed a man a day. They all go to make up so many pounds of material, and it will average up one month for another. I know the absolute cost of those things. I know what I would have to pay my help, how many people they could take care of, and figuring it out on that standpoint I added 2 cents a day for possible loss and 8 cents profit.

Secretary TAFT. How much do you figure in your contracts in the States ordinarily?

Mr. MARKEL. We figure that with the loss of the plant—we figure the plant will wear out in a short while, as we furnish ranges, cooking utensils, etc., the railroad company, furnishing the cars or buildings—we figure 20 per cent profit. We don't get it sometimes.

Secretary TAFT. Now, Mr. Markel, you have described the conference and discussion which you had when you reached the Isthmus with Mr. Stevens and Mr. Shonts. What was done as the result of this conference?

Mr. MARKEL. The contract was canceled.

Secretary TAFT. And what was said at the time of its cancellation?

Mr. MARKEL. Well, I was not in that conference.

Secretary TAFT. You simply received notice of its cancellation from Mr. Shonts?

Mr. MARKEL. Yes, sir.

Secretary TAFT. A written notice?

Mr. MARKEL. Yes, sir.

Secretary TAFT. Have you a copy?

Mr. MARKEL. Yes, sir.

Secretary TAFT. Can you include that among the papers you will send me?

Mr. MARKEL. Yes, sir.

Secretary TAFT. And there was not conversation at the time of the cancellation at all?

Mr. MARKEL. Well, no; I was not present. There was a conference between Mr. Shonts and Governor Magoon and Mr. Stevens, but I was immediately notified of the conference. We had a conference the day before.

Secretary TAFT. With reference to the possible cancellation—

Mr. MARKEL. Yes; or, rather, with reference to continuing it.

Secretary TAFT. What was said at that conversation?

Mr. MARKEL. Well, I said to them, that if it looks as though this contract can not be carried out as it is now; if you want me to do this business I will feed the silver men for 30 cents a day and I will do it just as you are now. It seems to me that ought to be satisfactory, and they all agreed it was. Now, I said, if you will release me from the expense of transportation on the Isthmus, furnish me transportation for my employees between Ancon and Panama, and will release me from the obligation of keeping the surroundings of the building clean—do that in your sanitary department—I will feed these gold-roll people at \$30 instead of \$36, and further, I will furnish to the occupants of cottages that board at the hotels the same amount of linen as I furnish the occupants of the hotels, and I will do that free. My reasons for that were simply these, Mr. Secretary: They were up against a pretty hard proposition down there under contracts that had been made with people who were to receive so much a month and their quarters. I was familiar with one case, and if you have time I will repeat it.

Secretary TAFT. Yes, do.

Mr. MARKEL. There were a couple of young men, steam-shovel men, who used to be on the Union Pacific, and they were hired under a contract for \$125 a month and quarters. One of them went down there in advance of the other and was assigned quarters in a cottage. Afterwards his friend came down under a contract of the same terms, and the cottages were full, and he was assigned quarters in the hotel. The manager said: These are your quarters, and it will be \$2.50 a month. For what? For the room. Well, he says, I was promised quarters, and have got a contract here that agrees to furnish quarters; and another thing, my friend over here—Bill Smith—is over there in a cottage; he don't pay any \$2.50, and I won't pay it. And I guess he didn't.

Under such an arrangement it would relieve me from keeping the grounds around the hotels clean—that very properly belonged to the sanitary department; they could do it better than anybody could—and the removal of garbage, etc. Those things were not charged up to expenses as Mr. Stevens was operating.

Secretary TAFT. And what you wanted to do was to be put on a level with what they were doing?

Mr. MARKEL. Yes, sir. The trouble was there was a misunderstanding, I think, of the contract on the Isthmus. The newspapers had stirred things up, and there were a great many things they imagined down there that had no foundation. For instance, this man

Jackson Smith was of the opinion that the quarters were to be turned over to the contractor and he would assign them, and that would legislate Mr. Smith out of a job. Mr. Stevens had got it in his head that the quarters were to be given to the contractor.

It was just as far as daylight is from dark. There was nothing in the contract to give the contractor control over the quarters, even over the hotels. The Commission had the right to assign those quarters. Well, after discussing the thing pretty thoroughly on Sunday, I think they were going to fix it up, but after discussion of the matter between Mr. Shonts, Governor Magoon, and Mr. Stevens it was decided the best thing was to cancel the contract, and inasmuch as they had the authority, and if they had not the authority I would have given it up because I don't want to get on anybody's toes, because it was the chance of my life to make a showing, and, of course, a chance to make some money; it was a great disappointment to me, but under the circumstances I think perhaps it was best to cancel it.

Secretary TAFT. Now, had you any conversation with Mr. Shonts at that time or later on about compensation to be made to you? Was there anything said as the result of that cancellation?

Mr. MARKEL. Why, I think they all agreed if it was canceled—

Secretary TAFT. I must ask you to be particular about this—what they said to you.

Mr. MARKEL. Why, both Mr. Shonts and Governor Magoon said that if that contract was canceled, I should be paid for my services, and that liberally; that was the gist of the talk.

Secretary TAFT. That was said to you on the Isthmus at that time?

Mr. MARKEL. Yes, sir.

Secretary TAFT. That was near the end of your visit?

Mr. MARKEL. Yes; we left the next day.

Secretary TAFT. You got back here?

Mr. MARKEL. The 17th of October.

(NOTE.—There is inserted here such notice as was received in Washington concerning the cancellation of the contract.)

[Translation of cablegram of October 11, 1905.]

ISTHMIAN, Panama.

Herald has Panama dispatch saying Markel contract annulled; many inquiries. What statement do you wish to make? * * *

EDWARDS.

[Translation of cablegram received October 11, 1905.]

ISTHMIAN, Washington.

Markel contract annulled.

MAGOON.

[Translation of cablegram received 11.13 p. m., October 12, 1905.]

ISTHMIAN, Washington.

* * * Markel contract cancelled by mutual consent. Hotel and boarding accommodations will be operated by Commission.

MAGOON.

Secretary TAFT. And when was the matter of your compensation brought up?

Mr. MARKEL. I think there is a letter there—let me see—

Secretary TAFT. November 8?

Mr. MARKEL. I think it was. It was between November 1 and 19. I think about the 8th.

Secretary TAFT. My memorandum shows it was November 8 they had the meeting of the directors.

Mr. MARKEL. Yes, sir.

Secretary TAFT. When you received notice of the cancellation of the contract did you take any action with respect to the men who were waiting in New York?

Mr. MARKEL. Yes, sir. I distributed them as far as I could.

Secretary TAFT. Did you cable?

Mr. MARKEL. I waited until I got back, with the exception of three men.

Secretary TAFT. Did you take anybody down with you? You said you left the 12 men. Did anybody accompany you?

Mr. MARKEL. Mr. W. B. Millard as clerk and assistant. It was my intention to make Mr. Millard a cashier and banker for me on the Isthmus.

Secretary TAFT. He was with you? Was your partner with you—your son?

Mr. MARKEL. No, sir.

Secretary TAFT. Only Mr. Millard?

Mr. MARKEL. Mr. Millard and a private secretary.

Secretary TAFT. The same as before?

Mr. MARKEL. No; another man, a man by the name of Elmer.

Secretary TAFT. That made four, all told, did it?

Mr. MARKEL. Yes; myself, Mr. Millard, and secretary. On Saturday, September 23, I sent Mr. Howe to the Isthmus. I had hired him from the Armour people at a good big salary as purchasing agent and fresh-meat man. He has been in the business all his life, and of course he was ready and had made arrangements to go with the other men on the 23d, and this cablegram coming, I finally sent him down so that he could familiarize himself with the conditions on the Isthmus, and it occurred to me that possibly the thing might be fixed up when we got down to the Isthmus, so I had him go.

Secretary TAFT. When you got back you presented your claim to the directorate, and it was for eleven thousand—

Mr. MARKEL. I presented my claim for my expenses, \$5,745.97.

Secretary TAFT. Did you not present a claim for the time you consumed in the matter?

Mr. MARKEL. I simply made a statement of the time I had consumed, and they were all familiar with it.

Secretary TAFT [pointing to statement of expenses before him]. I want to go over these items, Mr. Markel. The first item of your expense account is, "Cash expended by J. E. Markel, P. L. Markel, and secretary, traveling expenses, etc., up to September 19, 1905, \$1,550." What traveling expenses does that cover?

Mr. MARKEL. Fare from Omaha to New York; fare from New York to Colon; hotel and other expenses beginning after the 1st of June and ending September 19.

Secretary TAFT. How did you arrive at the total?

Mr. MARKEL. I put so much money in my pocket, and what I had left was left out.

Secretary TAFT. You did not take any vouchers for those expenses?

Mr. MARKEL. No, sir; I did not.

Secretary TAFT. Why did you not?

Mr. MARKEL. That would be impossible.

Secretary TAFT. Did you expect, then, to charge it?

Mr. MARKEL. No, sir; I anticipated if I got the contract—if the contract was carried out—I anticipated that to be my expense.

Secretary TAFT. That is why you did not take the vouchers?

Mr. MARKEL. Yes, sir.

Secretary TAFT. The next item is "Railroad fares, hotel bills, and traveling expenses of J. E. Markel and secretary, September 19 to October 19, 1905, \$290.35." That covers what?

Mr. MARKEL. Hotel bills, railroad expense from Omaha to New York, and return.

Secretary TAFT. You did not go to Omaha on the 19th of October?

Mr. MARKEL. I was in Chicago the 17th of October. I went to Chicago to fix up—you will find an item in there—an expense of settling bonds. Then there were hotel bills in New York. All those expenses are correct; but I did not take any receipts.

Secretary TAFT. Did you have any account of it, any statement of account at the time?

Mr. MARKEL. I think not. Only perhaps a memorandum.

Secretary TAFT. Do you think you could find that memorandum?

Mr. MARKEL. No, sir; I don't think I could.

Secretary TAFT. "Paid Panama Railroad Company for four tickets, New York to Colon and return, \$160." That was for your fare?

Mr. MARKEL. My fare, Mr. Millard's fare, Mr. Howe's fare, and Secretary Elmer's fare—four of us.

Secretary TAFT. That was your last visit?

Mr. MARKEL. Yes, sir.

Secretary TAFT. "Expense of L. B. Wadleigh (my partner) paid for railroad fare, hotel bill, and other expenses, \$209.10."

Mr. MARKEL. His home is in Pierre, S. Dak. He came to Omaha and then went back to Pierre, and we organized a stock company, and he attended to all those things. There was attorney's fees.

Secretary TAFT. You organized a stock company to do this work. You expected to do it under the name of a company?

Mr. MARKEL. Yes, sir.

Secretary TAFT. And Wadleigh was your partner in that matter?

Mr. MARKEL. My partner and father-in-law.

Secretary TAFT. And it was with reference to your entering into the contract under a corporate name that these expenses were incurred?

Mr. MARKEL. Yes, sir. His fare to New York and return. He had to come to New York, being a partner. He came to New York with me when I went to the Isthmus.

Secretary TAFT. That, too, was an item you had not intended to charge if you succeeded in closing the contract?

Mr. MARKEL. If the contract had been closed it would not have been charged.

Secretary TAFT. When did Mr. Wadleigh come to New York?

Mr. MARKEL. He got there the 22d of September with me.

Secretary TAFT. This was after the contract had been awarded to you?

Mr. MARKEL. Yes, sir.

Secretary TAFT. And so with respect to all these expenses except the one for \$1,550?

Mr. MARKEL. Yes, sir.

Secretary TAFT. Now, "Rent of New York office and settlement of

REPORT OF THE ISTHMIAN CANAL COMMISSION. 381

cancellation of lease which expired May 1, 1906." Did you open a New York office?

Mr. MARKEL. Yes, sir. As soon as the contract was signed I procured an office in the same building with the Panama Railroad. I had to sign a lease to the 1st of May.

Secretary TAFT. That is the 1st of May, 1906?

Mr. MARKEL. Yes, sir.

Secretary TAFT. And when you got back you gave up the office?

Mr. MARKEL. Yes, sir; and settled with them as cheaply as I could. That was for \$211.80; they held me up.

Secretary TAFT. Then "Tables, chairs, and miscellaneous expenses incurred in establishment of New York office, \$49.22?"

Mr. MARKEL. The railroad company have those now, using them; I turned them over to the railroad company.

Secretary TAFT. "Coupon books for use on Isthmus, worthless for other purposes, \$160." They were a system of coupons to be used not only for the silver men, but for the gold men? That is, every time they took a meal they would turn over a coupon?

Mr. MARKEL. Yes, sir.

Secretary TAFT. And you could not use those?

Mr. MARKEL. They were utterly worthless for any purpose.

Secretary TAFT. Except to carry out your contract?

Mr. MARKEL. Yes, sir.

Secretary TAFT. "Canned goods shipped to the Isthmus; order for those goods delivered to Mr. Walker, traffic manager for Panama Railroad Company; freight paid, \$35.20."

Mr. MARKEL. He got the goods and turned them over to the commissary department at the Isthmus.

Secretary TAFT. And you had paid for them previously?

Mr. MARKEL. Yes, sir.

Secretary TAFT. "Cost of settlement for premium on guaranty bond, \$100,000; railway, hotel, and other expenses, J. E. Markel and L. B. Wadleigh, \$152.00."

Mr. MARKEL. That was fare from New York to Chicago and return.

Secretary TAFT. One hundred and fifty-two dollars?

Mr. MARKEL. Yes, sir.

Secretary TAFT. You don't think you have duplicated any of these amounts?

Mr. MARKEL. No, sir.

Secretary TAFT. Did you go over them carefully with your secretary?

Mr. MARKEL. Yes, sir.

Secretary TAFT. You say railroad fares, traveling expenses of J. E. Markel and secretary, September 19 to October 19, 1905, which you said included your expenses to Chicago in reference to the settlement of the bonds on the 17th of October.

Mr. MARKEL. I went to Chicago twice, both on the 17th of October, and again, I think, on the 27th of October. I don't remember exactly. You understand that Mr. Wadleigh, in the meantime, had gone back to Pierre and he came from Pierre to meet me in Chicago, and I went from New York to meet him in Chicago.

Secretary TAFT. So you think there were two trips to Chicago?

Mr. MARKEL. Yes, sir; in that \$152.

Secretary TAFT. "Paid employee, G. T. Porter." Who was he?

Mr. MARKEL. He was formerly representative of the Armour people in Cuba.

Secretary TAFT. He had experience in the Tropics?

Mr. MARKEL. Yes, sir.

Secretary TAFT. And you charge nothing for his salary, but for his expenses \$74.45?

Mr. MARKEL. The arrangement I had with him was that he was to meet me in New York and go with me to the Isthmus, and he was not to have any salary at all until he went to work. He was not in my employ at that time, but I was to pay all of his expenses from Chicago to New York and to the Isthmus, and if he did not go to work for me, if there was no place there for him to fit in, if I had work for him when I got to the Isthmus, I was to pay him \$2,500 a year.

If I did not have work right off I was to pay his expenses. Inasmuch as he did not go to the Isthmus at all it put the burden on me of paying his fare from Chicago to New York and return and his hotel bill while he was in New York.

Secretary TAFT. "G. W. Clinton."

Mr. MARKEL. My traveling cook.

Secretary TAFT. "Salary from September 20 to October 14, inclusive, at \$4.16 a day, room and board, September 20 to October 14; railway ticket Leavenworth, Kans., to New York and return, \$200.84."

Secretary TAFT. Where was his home?

Mr. MARKEL. Leavenworth, Kans.

Secretary TAFT. "C. E. Hutschler." Who was he?

Mr. MARKEL. He was an old employee of mine.

Secretary TAFT. Was he a cook also?

Mr. MARKEL. He was a cook and manager. I expected to put him in charge of one of the hotels as manager. I was to have paid him \$150 a month. For room and board in New York for nineteen days I paid \$28.50.

Secretary TAFT. You paid his railway fare from Omaha to New York?

Mr. MARKEL. Yes, sir.

Secretary TAFT. You did not pay his fare back to Omaha?

Mr. MARKEL. No, sir; because I put him to work in New York, and he is still working there for me.

Secretary TAFT. "J. H. Hayes."

Mr. MARKEL. He was to be a clerk in hotel.

Secretary TAFT. "Salary from September 19 to October 19, \$50. Room and board thirty days, at \$1.50 per day. Railway fare from Omaha to New York. Railway fare from New York to Omaha, total \$132.15." His railroad fare from Omaha to New York, \$4.65, is pretty cheap.

Mr. MARKEL. He got a pass. His father is connected with the Burlington road. His railroad fare from New York to Omaha was \$32.50. I could not get a pass around in time for him.

Secretary TAFT. "E. B. Mooney, salary September 19 to October 15, 26 days, at \$4.16, \$108.16; room and board, 26 days, at \$1.50 per day, \$39; railway fare from Omaha to New York, \$32.50; total, \$179.66." Who was Mr. Mooney?

Mr. MARKEL. He was a manager.

Secretary TAFT. I see you paid \$32.50 for railway fare from Omaha to New York.

REPORT OF THE ISTHMIAN CANAL COMMISSION.

383

Mr. MARKEL. He is now in Maine in my employ. I sent him up there from New York.

Secretary TAFT. "C. E. Taylor, salary September 19 to 28, 10 days, at \$8.32, \$83.20; railway fare Chicago to New York, \$20; sleeping car, \$5; meals, \$22.95; room, \$17; incidentals, \$22.35; total, \$170.50." What did you expect to use him for?

Mr. MARKEL. As superintendent—as division superintendent. He has been in my employ for fifteen years.

Secretary TAFT. He was only detained in New York ten days. Did you discharge him by telegram?

Mr. MARKEL. No, sir; I cabled him and he went up into New York and opened up some business there.

Secretary TAFT. You will notice Mr. Taylor's fare is \$20.

Mr. MARKEL. I got, through my connection with the Illinois Central, half fare for him from Chicago to New York.

Secretary TAFT. "J. D. Howe, settlement of salary contract for one year, at \$5,000 per annum, \$1,000; expenses, \$146.05; total, \$1,146.05."

Mr. MARKEL. That is the man I hired for purchasing agent at \$5,000 a year.

Secretary TAFT. What were his qualifications?

Mr. MARKEL. A lifelong experience in the handling of meats, butter, eggs. He was with the Armour Packing Company. That is where I got him.

Secretary TAFT. And you made a contract with him?

Mr. MARKEL. Yes, sir; an agreement for a year. And then I had to settle with him. I took the young man from an excellent position in New York, where he was getting a salary of \$3,600 a year, and he could stay there just as long as he wanted to. After I got through with him he got another job. Of course it is not as good as the one he had before. They do not take people back and put them right in their old boots. They have to take a fall out of them; but he will eventually get back into his place, but it will take a little time, and these expenses, \$146.05, were for expenses I paid for him—hotel bills—while he was waiting in New York and while on the Isthmus.

I had sent him to the Isthmus to familiarize himself with conditions. My intention was to send him from Colon over to Kingston and other islands to arrange for a supply of yams and such things as those Jamaica negroes eat. Of course when the contract was canceled it was not necessary to send him there, but he was on his way there when he went to the Isthmus.

Secretary TAFT. "W. B. Millard, salary, \$250.00; expenses, \$138.92; total, \$388.92."

Mr. MARKEL. He was the one I took as banker and cashier, and he received a salary of \$3,000 a year.

Secretary TAFT. You paid him for one month?

Mr. MARKEL. Yes, sir.

Secretary TAFT. Where did he come from?

Mr. MARKEL. From Omaha with me. Mr. Millard has been connected with me in different enterprises for a great many years. About ten years ago he went into the mining business up in Montana. At that time he was vice-president of the Omaha National Bank. Well, he got to the end of his rope. He came to me the day before I left Omaha and had no idea that he was going to the Isthmus. He would

not go back to the bank and would not stay in Omaha, so I gave him a job.

Secretary TAFT. Was he a banker?

Mr. MARKEL. Yes, sir; he had been vice-president of the Omaha National Bank for years, and was vice-president of the Omaha Loan and Trust Company. He did all of Mr. Ames's business in the West for a great many years.

Secretary TAFT. "F. D. Elmer. Salary September 23 to October 17, at \$75, and expenses; expenses being \$15.94, total \$78.44."

Mr. MARKEL. He was my private secretary. I arranged for him to meet me in New York.

Secretary TAFT. Was he a stenographer?

Mr. MARKEL. Yes, sir; a very good one.

Secretary TAFT. "I. L. Miller." What was he intended for?

Mr. MARKEL. He was intended as a clerk and stenographer in the storeroom at Colon.

Secretary TAFT. You paid him \$2.50 a day for forty-two days—that was from September 19 to November 1?

Mr. MARKEL. I did not take him to Colon. I left him in New York with the other men.

Secretary TAFT. Why did you keep him down to the 1st of November?

Mr. MARKEL. It was the 8th of November before I got these matters all settled up and presented my bill, and I used him for that purpose. He is my private secretary now.

Secretary TAFT. You let Elmer go on the 17th of October.

Mr. MARKEL. Yes, sir; as soon as I returned to New York.

Secretary TAFT. Miller's expenses are \$69.25, and his railway fare from Omaha to New York and return \$65—that is, he went home with you?

Mr. MARKEL. Yes, sir.

Secretary TAFT. "Jay Burns, salary, October 5 to 17, thirteen days, at \$5, \$65; expenses, \$113; total, \$178." What place was he to fill?

Mr. MARKEL. He was to be one of the division superintendents.

Secretary TAFT. You let him go when you returned?

Mr. MARKEL. I put him on other work.

Secretary TAFT. So that almost all these expenses, Mr. Markel, except the first item, were expenses you incurred after the contract was let?

Mr. MARKEL. These expenses were incurred in anticipation of carrying out the contract. The \$1,550 was expended in anticipation of the contract.

Secretary TAFT. And with the exception of the \$1,550 item it is all itemized?

Mr. MARKEL. Yes, sir; I can swear to it. I can not swear to the item of \$1,550, because I did not keep account of it.

Secretary TAFT. Could you produce vouchers for the others?

Mr. MARKEL. I think I could. It would take a little time.

Secretary TAFT. I wish you would and send them to me. I want to have this thing in shape. I wish you would have your secretary run over your papers and send me as many as he can.

Mr. MARKEL. Yes, sir.

Secretary TAFT. What you received was \$5,000, in addition to these expenses?

Mr. MARKEL. Yes, sir.

Secretary TAFT. Now, Mr. Markel, I am very much obliged to you. Is there anything else that you would like to add? I am going to submit this to the President in my report to him. If there is anything else relevant to the subject I should be glad to have you state it.

Mr. MARKEL. I do not know of anything further to add.

Secretary TAFT. Do you think the \$5,000 which you received was a reasonable compensation—for what?

Mr. MARKEL. For nearly six months' service. I began in May to gather together this information in regard to the plans, and was engaged for June, July, August, September, and October.

Secretary TAFT. You were carrying on other business at that time?

Mr. MARKEL. Certainly; that is, up to the time I sailed to the Isthmus, but not after that.

Secretary TAFT. I thought you had other business; you spoke of other business in Maine and elsewhere.

Mr. MARKEL. I did, but I turned it all over; and in addition to that I canceled some profitable contracts with railroads in Colorado that I might concentrate myself on this business. Now, my scheme was to have an organization in this country whereby I could take my men to the Isthmus and after they had been there eight months or a year, or when they began to fill up with malaria, I could send them back and have them work in this country and take other men down there to fill their place and to use my organization back and forth. This will have to be done. A white man could not stay there year after year without getting some vacation. My scheme was to have an organization in this country so that I could do that. Good men can not afford to lay off and do nothing. It occurred to me that if they could come back to this country and work three or four months it would freshen them up.

Secretary TAFT. You went down to the Isthmus and was there about a month?

Mr. MARKEL. Yes, sir; I went down about the 1st of July. I was twelve days going. I went down on the *City of Savannah*.

Secretary TAFT. Then you were gone about six weeks?

Mr. MARKEL. Yes, sir; I was gone six weeks from the States on this business, and I did nothing else from the time I left New York but this business, only to scatter my men when I got back here from the Isthmus.

Secretary TAFT. If the contract had gone on you would not have thought of charging the company for your first visit there?

Mr. MARKEL. I certainly should not.

Secretary TAFT. It was really in anticipation of the contract or of the letting of the contract that you went down there?

Mr. MARKEL. Yes, sir. I went down there as a friend of Mr. Wallace and Governor Magoon. I have known Governor Magoon ever since he was a boy. He and my son are warm personal friends, and I went down there as a friend of the court, you might say. I felt as though it was due Mr. Wallace to give him the best of my opinion on the thing, then if it was to be let out to a contractor I was, of course, anxious to get the contract.

Secretary TAFT. To bid?

Mr. MARKEL. Yes, sir. But when I went there it was not thought that it was possible to make up any kind of a deal and let it out to contract. It was thought that it would have to be operated by the Government.

Secretary TAFT. Did you expect in that case to act as agent for the Government?

Mr. MARKEL. No, sir.

Secretary TAFT. Did you expect to be remunerated when you went down there on Mr. Wallace's invitation?

Mr. MARKEL. If I did not get the contract, yes.

Secretary TAFT. But if you did get it you did not?

Mr. MARKEL. No, sir; if I got it, I did not.

Secretary TAFT. Mr. Wallace does not say in his letter exactly what he had in mind. The expression he uses is "I would be pleased to have you give careful consideration to the problem involved, and if it is a matter that strikes you seriously and you care to look into it further, with a view ultimately to making some arrangement of the kind indicated, it might be well for you to visit the Isthmus and familiarize yourself with the conditions." Apparently he had in mind some kind of a contract, by which that work should be done, and he thought that you being in the business would be interested and be a possible contractor?

Mr. MARKEL. Yes, sir.

Secretary TAFT. I do not know that he had clearly in his mind just what relation you were going to occupy to the Commission. The way I took that letter was that he wanted you to come down there and help him out.

Mr. MARKEL. If the matter could be arranged I was to have been a prospective contractor. That is the way I thought about it. I should have gone there on Mr. Wallace's invitation and spent my own money, because I had done a great deal of work for him and was treated by him very nicely and fairly. Just a year before that he wired me to come to Chicago. I went over there. He told me where he expected some trouble and said: "Now, we may have 1,000 men and may have 3,000 men to feed, and I want you to do that work quick. Now, can you get ready and take care of 3,000 men?"

This was on Thursday. I said "I can be ready by Saturday." "All right," he said, "get ready and come on." That is all that was said. There was nothing said of a contract, agreement, or anything else. I got cooking material and bedding together, took everything I had and went to Chicago, and by Saturday night I had a complete boarding outfit ready for service. I had everything arranged to do my cooking by steam, but the occasion did not arise to use it. They simply paid me what money I had expended in hiring my help and other expenses that I had incurred, hotel bills, etc., and gave me a thousand dollars. They got out of an expense of \$100,000 probably in getting ready. There was not any understanding between Mr. Wallace and me, and the gist of the whole thing is in that letter.

Secretary TAFT. You devoted four or five months to it?

Mr. MARKEL. Yes, sir; and had given them the best that I had in me, and had gotten the contract fairly, open and above board. There was not a crooked thing in the whole business. I had no information other than other men had. The only advantage which I had was because I had been on the Isthmus and knew the conditions and had long experience in this work.

Secretary TAFT. What do you consider, Mr. Markel, your services as an expert worth for a year? Suppose you were asked to manage a work down there on the Isthmus.

and take over Corral and Culebra. On my arrival in New York the 23d, there were some very disquieting cablegrams there from the Isthmus—one from Mr. Stevens, who seriously objected to the con-

Mr. MARKEL. My earnings are from \$20,000 to \$25,000 a year.

Secretary TAFT. Of course that involves investment of capital?

Mr. MARKEL. Certainly.

Secretary TAFT. Do you think \$5,000 was a fair valuation of the services you rendered to the Commission in the matter of expert knowledge and expert direction?

Mr. MARKEL. Yes, sir; I consider it a fair compensation. I really thought that under the circumstances they ought to have given me \$10,000. I just thought that. I did not think it out aloud. There never was any talk with the directors or with Mr. Shonts, or anybody else what the compensation would be. I left it entirely with them. If they had given me \$4 it would have gone, and if they had given me \$10,000 it would have gone.

Secretary TAFT. What they did in the matter was satisfactory to you?

Mr. MARKEL. I considered the \$5,000 justly earned by me.

Secretary TAFT. I am very much obliged to you for keeping you so long, but it was important to get your full statement on the subject.

Mr. MARKEL. I am at your service at any time. I haven't done anything that I want to cover up.

Secretary TAFT. If you will be good enough to send me your expense account for your trip here and back, I shall be glad to see that it is paid.

SUPPLEMENTARY STATEMENT OF MR. MARKEL, JANUARY 1, 1906.

In reply to the Secretary's question if I had handled large enterprises: At one time I was operating the eating houses and hotels on the Union Pacific, the boarding outfits on the same road; also the eating houses and hotels on the Kansas City Southern, and the boarding outfits on the Illinois Central, extending over about 5,000 miles of railroad; the Hotel Millard, at Omaha, and the feeding privileges at the Omaha Exposition, and was serving from 40,000 to 60,000 meals a day.

In reference to my plans for the organization on the Isthmus, it was intended to have a storeroom in connection with the refrigerator and other plants at Colon, and to operate from there each day a supply train in charge of a messenger, whose duty it was to supply the hotels and camps each day with fresh meats, vegetables, fish, eggs, and other supplies, insuring a fresh supply, and I had taken up with a large fishing firm of Gloucester, Mass., the proposition of their sending to those waters a troller and the necessary men to secure a supply of fresh fish. There is no place in the world where they have more or better fish than on the Isthmus, but owing to the laziness of the natives it is impossible to be insured of a supply, because they will not go after the fish as long as they have a dollar.

It was intended by this firm to take the matter up with the traffic department of the steamship and railroad lines and arrange with them transportation from Colon to New York of the surplus supply of fish, thus giving the refrigerators that were installed upon the ships a return business.

I had also arranged with a practical gardener to go to the Isthmus and inaugurate at each hotel a truck patch to supply the hotels with fresh vegetables, etc.

a ways from the railroad station.

For instance, I would have to pay \$6 per ton for coal delivered at railroad station. Now, when I got to the Isthmus I found at Culebra

Mr. MARKEL. Yes, sir; every form of contract.
Secretary TAFT. Of course, the risk that Government runs in the matter can be calculated at considerable less in this, just as the Gov-

**CORRESPONDENCE SUBMITTED BY MR. MARKEL TO ACCOMPANY
HIS EXAMINATION OF DECEMBER 31, 1905.**

[Personal.]

PANAMA, *March 4, 1905.*

Mr. J. E. MARKEL,

Omaha National Bank Building, Omaha, Nebr.

MY DEAR MR. MARKEL: I find it necessary to take up the question of the installation of a complete commissary department on the Isthmus. Authority has been given for the erection of six hotels or bachelor quarters, in each of which will be sleeping accommodations for about 60 men and dining-room facilities for approximately 100, it being the intention to provide for our bachelor employees of the higher class in these buildings, and in the vicinity thereof to construct separate quarters for married employees, giving the latter, however, the option of boarding at the hotels to such extent as they may desire.

These hotels will be located at Ancon, which is in the vicinity of Panama, Corozal, Pedro Miguel, Culebra, Bas Matachin, and Cristobal-Colon. The possibilities are that others will be erected of a like nature later on.

The class of persons to be taken care of are civil engineers, general foremen, superintendents, clerks, etc., and, later on, enginemen, conductors, and various grades of white foremen.

It is probable that in time we will put up additional buildings in order to provide for our higher class of officials and employees in one set of houses and our other white employees in another.

The possibilities are also that we may have to provide a series of boarding trains, which will be made up of camp cars, providing for the accommodation of from 100 to 200 men on each train, these trains being shifted from one part of the work to another as the necessities of the situation may render necessary.

We may also have to go to the extent of providing subsistence for approximately 10,000 to 12,000 or more workmen.

Naturally it has suggested itself to me that this entire commissary department should be under the control of some one, similar to yourself, who has had large experience in the successful handling of business of this character. I would like to have an expression of your views and ideas in relation to it.

To be frank with you, the principal difficulty in the way is the fact that under ordinary governmental methods and the ruling of the Treasury and accounting departments board bills of employees can not be deducted from the amount due them on the pay roll, and I have been informed that the only way we can handle a commissary department of this kind is for the Isthmian Canal Commission to operate it through salaried employees. On the other hand, it has been suggested that it would be an easy matter to secure during the next session of Congress such modification of existing laws as may be necessary to apply business principles to the work in hand, which as you know is more or less of an emergency nature.

Outside of the question of deducting board bills from the pay rolls and paying the amounts over to the commissary department, I see no difficulty. Our employees are well paid; can not leave the Isthmus without our knowledge, and only by the steamship lines. There is no other source of employment open on the Isthmus except that which is under the control, either directly or indirectly, of the Isthmian Canal Commission that would take care of any perceptible number of men.

It is also possible for the Isthmian Canal Commission to pass such laws applicable to the Zone as would effectively discourage the non-payment by employees of accounts of this character, so that, after all, the risk of loss through bad credits would be small.

I would be pleased to have you give careful consideration to the problems involved. If it is a matter that strikes you seriously and you care to look into it further with a view to ultimately making some arrangement of the kind indicated, it might be well for you to visit the Isthmus and familiarize yourself with the conditions.

While I expect to be called to the States possibly during the next two months, I do not want to go if I can avoid it before the 1st of May, as I prefer to take chances of mosquitoes with murderous intent and capabilities rather than to expose myself to the chill of your northern winds during March and April. You can see by this to what extent the demon of the Tropics is casting its seductive spell over me.

Getting down to business again, I will state that I now have over 500 Americans in my employ, and about 1,000 mechanics and artisans composed of every nationality under the sun; also some 3,000 laborers. Our force is increasing at the rate of about 600 men per month, about 100 of whom are white men from the States. This rate of increase will continue for possibly three years.

Very truly, yours,

JOHN F. WALLACE.

CHICAGO, ILL., May 10, 1905.

MR. JOHN F. WALLACE,

Chief Engineer, Isthmian Canal Commission,

Washington, D. C.

DEAR SIR: Referring to conversation regarding the commissary arrangements and operation of boarding houses at Panama:

I have taken the matter up with my son, Pryor, and we would be glad to take charge of this business. My son is now 35 years of age, in perfect health, has had years of experience with me in this line of business, and especially the past five years has had charge of our hotels, eating houses, and boarding outfits on the Kansas City Southern, making a success of the business. I will go to Panama with Pryor, and if arrangements are made, will help him organize, he remaining, so if you will arrange transportation for myself and son, P. L. Markel, New York to Panama and return, will arrange matters to go there next month.

As we are entire strangers to that country, any letters of introduction or information that you would care to give in regard to the arrangements for the trip would be appreciated.

I think the strike situation will be settled in Chicago in a few days, which will enable me to make arrangements to be absent from this country. We should want to meet you on the Isthmus, that details of our proposition could be gone over, and being on the ground would

be a great aid to us in developing our plan. If consistent, would thank you to advise if you will remain on the Isthmus during the month of June, as we will arrange our trip to suit your convenience.

I would thank you to address me at my office, room 17, Nebraska National Bank Building, Omaha, Nebr.

Very truly, yours,

J. E. MARKEL.

ISTHMIAN CANAL COMMISSION,
Washington, D. C., May 12, 1905.

Mr. J. E. MARKEL,
Nebraska National Bank Building, Chicago, Ill.

DEAR SIR: Your letter of May 10 is just received. Some time ago I sent you a letter which miscarried and was returned. I just sent it this morning to Mr. T. M. Orr to forward to you.

I have written to Mr. E. A. Drake, secretary and treasurer of the Panama Railroad Company, New York, requesting him to provide you and your son with free transportation to the Isthmus when you decide to go down. I also inclose you a note addressed to Mr. Drake in the same connection. I shall be in Panama until the middle of next August, and will be very glad to have you come down.

Yours, truly,

J. F. WALLACE,
Chief Engineer.

P. S.—By free transportation I mean our \$25 rate, which is intended to cover cost of meals only.

PANAMA RAILROAD COMPANY,
Washington, D. C., May 12, 1905.

Mr. E. A. DRAKE,
*Secretary and Treasurer, Panama Railroad Company,
No. 24 State street, New York City.*

DEAR SIR:—This will be handed to you by Mr. J. E. Markel, of Chicago, Ill., concerning whom I have written you. I have requested Mr. Markel and his son to visit the Isthmus, so that I may have a conference with them concerning matters connected with the canal, and would like you to arrange free transportation for them when they decide to go down.

Yours truly,

J. F. WALLACE,
Vice-President and General Manager.

P. S.—By free transportation I mean, of course, the \$25 rate, which is intended to cover cost of meals.

CHICAGO, May 19, 1905.

Mr. JOHN F. WALLACE,
Chief Engineer, Isthmian Canal Commission, Panama.

MY DEAR MR. WALLACE: Your letter of the 12th, with inclosure to Mr. Drake, reached me to-day, as did your former letter written from Panama March 4.

The strike situation here is about the same, with prospects of a settlement this week. However, I shall arrange to leave one of my best lieutenants in charge of the situation here and return to Omaha the first of next week and complete my arrangements to go to Panama.

Thanking you for the consideration shown me, assuring you that I will give my best efforts to this proposition, and hoping to meet up with you soon, I remain,

Yours, truly,

J. E. M.

P. S.—General offices, rooms 17, 18, and 19, Nebraska National Bank Building, Omaha, Nebr.

CHICAGO, May 20, 1905.

Mr. E. A. DRAKE,

*Secretary and Treasurer, Panama Railroad Company,
New York City.*

DEAR SIR: Pardon my troubling you with my personal affairs, but recently myself and son, P. L. Markel, have arranged to go to Panama, at the request of Mr. Wallace, chief engineer of the Isthmian Canal Commission, to look over a proposition that he has there. As I am an entire stranger to that country and to the route of getting there, I would thank you very much if you would advise me the sailing days of the steamers that I might make my arrangements accordingly, and if it is necessary to engage staterooms in advance. In addition to myself and son, I will probably have a private secretary with me. Mr. Wallace has sent me a letter of introduction to you, which I will present when in New York. I am in hopes to get away for Panama as early in June as it is possible for me to make my arrangements.

Won't you kindly send me such information as you would be pleased to give to my office, room 17, Nebraska National Bank Building, Omaha, Nebr.

Yours, truly,

J. E. M.,
President.

NEW YORK, June 23, 1905.

Mr. W. E. DAUCHY:

This will introduce to you Mr. J. E. Markel, who has been negotiating with me to take charge of all hotel arrangements connected with the department of construction and engineering. He is accompanied by Mr. P. L. Markel and Mr. J. M. McLaughlin, his assistants.

Mr. Markel is a gentleman of wide practical experience in the hotel business, and will no doubt make a full and careful investigation of all conditions on the Isthmus relative thereto, which I will be glad to have you facilitate as much as you can.

Please instruct Captain King to cooperate with him in every way possible in connection with this work, and, subject to your approval, immediately make effective any plans or policy of management submitted by him.

Very truly yours,

JOHN F. WALLACE,
Chief Engineer.

REPORT OF THE ISTHMIAN CANAL COMMISSION.

393

ISTHMIAN CANAL COMMISSION,
New York, June 23, 1905.

Mr. E. A. DRAKE,
*Secretary and Treasurer Panama Railroad Company,
24 State street, New York.*

DEAR SIR: This will be presented to you by Mr. J. E. Markel, who, in company with Mr. P. L. Markel and Mr. J. M. McLaughlin, will sail for Colon on the *City of Savannah* Monday, June 26.

These gentlemen are engaged upon official business of the Isthmian Canal Commission, and you will please furnish them with the necessary transportation from New York to Panama and return, chargeable to the Commission.

Very truly yours,

JOHN F. WALLACE,
Chief Engineer.

PANAMA, *July 20, 1905.*

SHORTS, *Washington:*

Question of board for employees of all grades giving much concern. J. E. Markel, Omaha, well known to me, many years experience similar propositions with railroads and construction companies, here for past two weeks on invitation Wallace. Have figured out plan involving refrigerators on Panama and United Fruit Company's ships; central station at Colon composed of ice plant, cold-storage house, bakery, laundry; supply train of refrigerator and express cars delivering daily to hotels and mess halls along line. Commission to erect buildings and install plant. Query as to whether Commission should assume whole or partial actual operation, or turn over entire matter to one private concern. I favor turning over to private enterprise; Commission fixing charge for board, giving concessionaire privilege of commissaries, if desired, but think concessionaire could secure goods cheaper provided given same rates transportation. Concession relieves Commission from securing and maintaining personnel, a difficult if not impossible matter, and difficulties of operation.

Anxious you should discuss in detail proposition with Markel. Shall he remain here or return to United States on *Seguranca*, sailing Saturday?

MAGOON.

[Cablegram.]

WASHINGTON, *July 21, 1905.*

ISTHMIAN, *Panama:*

Shorts actively considering refrigerating plant with cars on the Isthmus; also boarding concession, and will take up with you on arrival refrigerating plant under way; refrigerating cars under construction.

PEPPERMAN.

ISTHMIAN CANAL COMMISSION,
DEPARTMENT OF CONSTRUCTION AND ENGINEERING,
Panama, July 20, 1905.

HON. CHARLES E. MAGOON,
Isthmian Canal Commissioner, Panama.

SIR: After investigating the situation in reference to care of your employees, herewith submit for your consideration an outline of what, in my judgment, would be best suited to conditions here.

Have been advised that arrangements are well under way toward the erection of a number of buildings for the care of the gold-roll employees.

The houses at Corozol and Culebra, with a few additions to the cooking and other equipment, with the installation of steam for culinary and sanitary purposes, will answer nicely.

There should be a number of other houses constructed, furnished, and equipped with everything necessary for the proper operation of the same. In the construction of the new houses, would be pleased to furnish suggestions as to the arrangement of the interior or working part of the hotel, and may be able to suggest some changes in the present plans that would greatly add to the convenience thereof, as well as economy of operation.

Would suggest that a general office, storeroom, ice and refrigerator plant, laundry, and bakery be located at Colon, and in connection with this general storeroom a supply train should be operated daily, leaving Colon early in the morning, distributing provisions, meat, etc., and ice to the refrigerators located at the different hotels and camps along the line.

Two refrigerator cars properly partitioned and a baggage or express car would take care of the business for some time.

On a separate sheet I submit to you the approximate cost of the ice and laundry plant.

Referring to the common laborers, am inclined to the opinion that this class of employees should have regular meals served to them of wholesome and well-cooked food in such quantities as would insure them strength to do a day's work. This should consist of such provisions as they have heretofore been accustomed to, with the addition of a substantial meat ration at least once per day, with soups, vegetables, coffee, etc.

The suggestions above are, in my judgment, necessary in any event, and should such an organization meet with your approval, and you would care to turn this business over to a private corporation, we would consider the proposition, providing that we may be allowed, in addition to the construction, furnishing, equipping, and maintenance of all the necessary buildings, a free freight rate, including refrigerator service from United States ports to Colon for our material, provisions, etc., and free transportation on the Panama Railroad to and from our hotels and camps; free transportation for our employees from the United States and on the Panama Railroad, with same return rate as granted canal employees; to be furnished coal, light, and water free; to be granted protection, and deductions made for such amount as is due us from the employees; our employees to be granted the same hospital arrangement as employees of the canal; we to be granted cable rate as given the Commission.

Under the conditions as outlined we would agree to furnish and care for your employees at the following rate:

At the hotels, \$30 per month for room and board, which includes the care of the linen, towels, etc.

Table board, \$22.50 per month.

Single meals, 25 cents.

The laboring class at the camps, approximately 50 cents per day.

It would be our constant and earnest endeavor to furnish such food, service, and accommodation at the price mentioned above as will compare favorably with a like service to this class of employees in the States.

It will be necessary to bring to the Isthmus a staff of skilled employees to take charge of the different hotels and departments in our organization. Our estimate for their salaries is somewhat of a guess, but as compared with our employees in the States in similar positions it would without doubt be necessary to pay that amount to get them to come and remain; their board and lodging, of course, would be furnished free in addition to their salaries. It would also be necessary to keep on hand three or four extra cooks and one or two managers and their wives, to take the place of any who should become ill.

For such positions we would bring for each of the hotels at which it is proposed to care for 150 regular guests, or more, the following staff:

	Per month.
Manager and wife	\$150
Head cook	150
Second cook	100
Third cook	75
Storekeeper	75
Cashier	125
Head lunch-counter man	75
Head waiter	75
For general office:	
Purchasing agent	400
General inspector	300
Assistant inspector	200
Traveling auditor	200
Chief clerk	250
Stenographer	150
Three clerks, \$125 each	375
General storekeeper	150
Supply-car manager	100
Mechanical department:	
General foreman for steam plant	300
Assistant foreman	125
General foreman for bakery	150
General foreman for laundry	150
Assistant foreman, laundry	75
Butcher	150

Unless engineers could be procured here for the steam plants, same would have to be brought from the States.

Should we arrange to take charge of this business, it is the intention that myself and son will give it our personal attention, and later on it is our desire to have our families with us at least a part of each year, in which event we would request to be furnished a house at some convenient and healthful location.

Trusting that the above will meet with your favorable consideration, beg to remain,

Very truly, yours,

J. E. MARKEL.

APPROXIMATE COST OF LAUNDRY PLANT.

The American Laundry and Machinery Company propose to deliver f. o. b. beat New York all of the necessary machinery, including engines, boilers, and the installation of the same, exclusive of the building, for the sum of \$8,075.

This plant will produce a minimum of 10,000 pieces in ten hours. To double this capacity it will be necessary to install extra washers, extractors, etc. (the original plant having sufficient steam capacity for the additional machines), exclusive of the building, at a cost of \$5,102.

The refrigerator plant.—To consist of machinery of 150 tons capacity, which will be ample to produce 50 tons of ice every twenty-four hours and to cold store 200,000 pounds of meat—divided into four rooms; also, if desired, a room of sufficient capacity to freeze 10,000 pounds of fish per day and a room for the storage of the frozen fish.

The above six rooms will practically be of the same size, and are approximately 20 by 15 by 8 for fish and 20 by 15 by 12 for meat, which will cost, exclusive of the building, \$31,500. This contemplates the furnishing of all necessary boilers and engines.

In reference to steam for the two plants, there is an abundance of engines, boilers, etc., on the Zone which could be used for this purpose, thereby cutting down the cost of the plants greatly. Would suggest in order that you might get quick action that a locomotive or portable boiler be used, temporarily at least.

JULY 29, 1905.

Mr. JOHN F. STEVENS, *Chief Engineer.*

DEAR SIR: Referring to our conversation recently in regard to cots for the employees, it suggested itself to me that the discarded locomotive flues could be cut in lengths of 7½ feet, and by the use of canvas 4 feet wide, turning over each edge 6 inches, double-seaming it, and passing the locomotive flues through these openings, and building some racks to hold the ends of the flues, excellent cots can be made for your employees.

In regard to the boarding house at Pedro Miguel, if it is decided to go on with that work I could and would spare you an excellent cook, which I now have at New Orleans. Should I do anything on the Isthmus it was my intention to bring him here as traveling cook. He could operate Pedro Miguel or any of the other boarding houses should the men I mentioned to you fail. While I need this man in my business, I would be willing to loan him to you people, if you thought it necessary to have him. I could wire my office and have him meet me in New York on my arrival and could get him to you by the time any of the houses were ready.

Yours, respectfully,

J. E. MARKEL.

JULY 29, 1905.

Mr. JOHN F. STEVENS,
Chief Engineer.

DEAR SIR: In reference to commissary or feeding arrangement that might be made available at once, and that you may utilize what material and forces you have on hand to take care of the present force, would suggest that commissaries be established at Gorgona, Bas Obispo, Empire Hill, Culobra, Rio Grande Superior, Paraiso, and Pedro Miguel; that construction be commenced on the hotel at Pedro Miguel at once, if it is intended to build one there, but I would suggest, instead of putting a hotel up at Pedro Miguel, that it be located on Ancon Hill, on the ground now occupied by the hospital office,

opposite the governor's residence, utilizing the present building for kitchen or quarters for employees of the hotel.

The present commissary which you have should be extended to supply the subcommissaries mentioned above and the hotels at Corozal and Culebra, which are now in operation.

Gorgona.—At Gorgona there is a building on the south of the track, which is about completed and has been leased by a mechanic working in the shops by the name of William Davis, and he expects to open up July 31 to furnish meals for the white employees who are in and about Gorgona and the shops. He can take care of 75 to 100 people, and I would recommend that he be given all the advantages of the commissary and supply train.

To take care of the colored people, recommend that building No. 76 be overhauled and used as a storehouse, which I think will be large enough for present needs. Should it require extension, building No. 77 is near by and can be utilized. At this commissary any employee should be permitted to purchase his supplies. This, I think, will take care of all the employees in that vicinity. However, should it fail to do this, there is a building within about 300 yards of the shops, and at the side of the main line of the Panama Railroad, that can be utilized for a commissary, but is not necessary at present. Would also recommend the immediate construction of the hotel at this point.

At Gorgona there are a number of houses already repaired that the bachelor mechanics occupy for sleeping quarters, and it is intended that they get their meals at the boarding house mentioned above.

Bas Obispo.—At the present time there are not many employees at Bas Obispo, but if the work goes on at the rock cut a commissary should be arranged at that point, and can be done easily by occupying a two-story building on a side track near the shops, the number of which I was unable to get, but is easily identified on the map.

Empire Hill.—This is the logical center of a number of camps, but there is no building available. One can be easily constructed, and I would recommend a building 30 by 80 be located on the sidetrack about halfway between the station of the Panama Railroad and the shops on the east side. A cross-over track should be put in from the main line to this sidetrack, which passes almost around the hill. From this commissary the employees at Lirio, Cerno, and Cunette, which are colored camps, having a number of single men and married men with families. This would supply them for the present with the necessary accommodations. Later on, when the forces increase, there should be a commissary at each of the three places above mentioned and a hotel erected on Empire Hill.

Culebra.—At this place the hotel is in operation, and, as I understand, it will change hands August 1. I would recommend that the proprietor of that establishment be granted all the facilities of the commissary and supply car.

To supply the families of the white people and the colored population at Gold Hill, would recommend that building No. 68, which is near the station and will be thoroughly overhauled in a few days, be used for a commissary. This would supply for several months the needs of that vicinity.

Rio Grande Superior.—At this place there is a large camp of colored people. I would recommend that house 121 be used for a commissary, and inasmuch as a lease has been granted to Mr. Carnavagio,

I would recommend that it be canceled, as it is directly in front of house No. 121. Building 128 should be fitted up for the manager of the commissary to use for living quarters.

Paraiso.—At Paraiso there is a canteen building in good repair, 20 by 80 feet. A portion of it is being used by a Mr. Johnson as a boarding house, and he is taking care of about 40 men. I would recommend that this be continued and that this party be granted commissary and supply-car privileges. This would take care of the white people for several months. Later on a standard hotel should be erected on the hill at this point.

Utilize house No. 53, located near side track, for a commissary building, and No. 104 could be assigned as residence and quarters for the manager of the commissary. Both of these buildings are now being repaired, and can be put in good repair in ten days. This commissary would supply all employees in that vicinity, including Cucaracha, for some time.

Pedro Miguel.—Should it be decided to construct a hotel at this point it should be located on the hill to the west of the railroad, and should be the standard type. While this construction is going on it would be necessary to take care of the white and colored carpenters and laborers at that point, and I would recommend for that purpose that building No. 23, now almost repaired, be utilized for kitchen and dining room for white employees, and commissary for all employees. They have some buildings there now undergoing repairs that will accommodate about 50 men with sleeping quarters. I understand, though, that this building, No. 23, has been assigned for school purposes. If it is inadvisable to divert this building then No. 9 would be available, but would lessen the sleeping accommodations greatly.

To take care of the colored laborers, etc., there are ample houses at Pedro Miguel Junction that could be easily arranged for sleeping accommodations, and they can get their commissary supplies at Pedro Miguel.

There should be put in operation a supply car, which will leave the commissary at Colon every other day, this car to be operated by a messenger whose business it is to deliver the goods directly to the commissaries and houses. The car could be switched over the Culebra wye to supply the hotel commissary at Culebra and Rio Grande Superior, then return over the wye and main line to Pedro Miguel Junction, from that point to Paraiso, then back over the main line to Pedro Miguel and Corozal, then to Panama.

The great trouble existing now is, first, to get the commissary at Colon, and then to get the supplies to the houses where wanted. As it is the service is very indifferent.

Yours, respectfully,

J. E. MARKEL.

[Telegram.]

PANAMA, August 7, 1905.

MARKEL, Waldorf, New York:

Will arrive 14th prepared to negotiate hotel concession on basis Commission furnishing plant; concessionaire operate at his expense with guaranty of board, subject to Comptroller's favorable decision.

SHONTS.

REPORT OF THE ISTHMIAN CANAL COMMISSION. 399

[Telegram.]

NEW YORK, August 16, 1905.

NATIONAL HOTEL COMPANY,
No. 17, Nebraska Bank Building, Omaha, Nebr.:

Are wiring Mr. Markel separately. Please repeat to his present address, of which advise us.

DRAKE.

[Telegram.]

NEW YORK, August 16, 1905.

Mr. J. E. MARKEL,
No. 17 Nebraska National Bank Building, Omaha, Nebr.:

How many tons capacity do you think the cold-storage plant at Colon should be?

SHONTS.

[Telegram.]

OMAHA, August 17, 1905.

T. P. SHONTS,
Chairman Isthmian Canal Commission,

24 State Street, New York City:

Would recommend five cold-storage rooms and one freezing room about 15 by 18 each and capacity to make at least 50 tons of ice per day. This will take care of practically 200,000 pounds of meat, etc. Freezing plant, office, laundry, bakery, and commissary storeroom should be in one building. Recommend it be located on new docks at Cristobal. Mail further information to-day.

J. E. MARKEL.

ISTHMIAN CANAL AFFAIRS,
New York, September 6, 1905.

Mr. J. B. MARKEL,
Waldorf Hotel, New York.

DEAR SIR: Referring to your bid for feeding the employees of the Isthmian Canal Commission:

In order to prevent any subsequent misunderstanding, beg leave to make certain points clearer than possibly our specifications made them.

Where neither the railroad nor Commission own electric plants, as mentioned in our specifications, we would expect the contractor to put in small electric-light plants, such as are used in this country, as kerosene is too dangerous a commodity to have around our buildings.

In regard to bed linen and towels, would say the Commission would expect the bed linen to be changed daily, and one bath towel and two hand towels be furnished for each person each day, besides a supply of roller towels in the public wash room. The bath towels should be at least 24 by 48 and the hand towels 17 by 34 inches in size.

I also desire to call your attention to the large amount of veranda space surrounding the hotels. These verandas, as well as the walks

and grounds around the hotels, must all be kept in a thoroughly clean and sanitary condition. I inclose you a photograph of the Culebra Hotel, in order that you may have an idea of the amount of veranda space to be kept in order. This, in addition to the interior of the hotel, must be taken into consideration in figuring on the maintenance and care of the rooms.

In a general way our gold employees are men of education and refinement, who draw salaries of from \$125 to \$600 a month, and are used to not only comforts, but many of the luxuries of life. The service and meals we would expect furnished this class of employees must be of a high grade, both in quality of material cooked, and in the manner of serving at the table, and should approximate the service of a \$2 hotel in the States. In view of the climatic conditions I desire also to call your attention to the fact that it will be necessary to ship only the best grade of export meats to the Isthmus.

In regard to service for silver men: It is expected that the houses and surroundings in which silver men are fed shall also be kept in a neat, clean, and sanitary condition and that the cooking utensils and tableware shall be kept clean and sanitary. In order to accomplish the latter, it will be necessary to sterilize same after each meal. The tables will be covered by white oilcloth, kept clean. Again, in order to prevent all misunderstanding, would say that the price of meals for silver men must include the care of the buildings, grounds, tables, cooking utensils, etc., as, so far as they are concerned, there is no care for rooms.

In regard to the sale of uncooked foods, the contract contemplates not only the sale of cooked and of uncooked foods, but the other items mentioned. So far as tobacco and cigarettes are concerned, that is governed by concession sold by the Panamanian Government each year, and the contractor would either have to pay him duty or buy from the concessionaire who controls that business on the Isthmus. It is not intended that the contractor will sell general commissary goods outside of uncooked goods and the articles mentioned, for the reason that there is a treaty obligation between the United States Government and the Panamanian Government limiting the sale of commissaries to certain classes of employees, and it is the purpose of the Commission to limit the sale of food stuffs, etc., to the items mentioned in our specifications, so that our Government can keep the control of the commissaries in its own hands, so as to regulate it as occasion requires. We will expect the contractor to cooperate with the Commission in its efforts to avoid friction as between the two Governments.

It is the intention of this agreement to limit the sale of these cooked and uncooked foods and other items mentioned to employees of the Commission and of the railroad company, and not to do a general merchandizing business.

It is also clearly understood that the prices shown in the specifications for freights on steamships and in cold storage is limited entirely to goods used in feeding the railroad company and Canal Commission employees, and not to outsiders.

You also understand that the yams, yuccas, and dried fish required by the Jamaican laborers can not be secured any place except on their island. I presume you are familiar with the method required to produce these supplies and the cost of same, as they will be a very prominent item in the food required by this class of labor.

I will be glad if you will please state that in submitting your bid your understanding of those portions of our specifications referred to by me is the same as stated by me in this communication.

Yours, truly,

T. P. SHONTS.

NEW YORK, September 6, 1905.

Hon. THEODORE P. SHONTS,
President Panama Railroad and Steamship Company,
24 State street, New York.

DEAR SIR: Replying to your letter of even date, in reference to my understanding of the proposition looking toward the care and feeding of the employees of the Panama Railroad and Canal Commission, I beg to advise that all of the matters mentioned in your letter have been fully considered by me. In submitting my bid my understanding of these portions of your specifications, referred to in your letter of to-day, was the same as yours, and I herewith assume all responsibilities therein contained.

Yours, truly,

J. E. MARKEL.

ISTHMIAN CANAL AFFAIRS,
New York, September 7, 1905.

Mr. J. E. MARKEL,
The Waldorf, New York.

DEAR SIR: Referring to the contract entered into to-day between the Panama Railroad Company and yourself relative to feeding the employees of the Panama Railroad Company and the Isthmian Canal Commission on the Isthmus of Panama, and that portion of the contract which specifies that the same shall not be transferred by you without written consent of the president of the railroad company, beg leave to say that I understand it is your intention to organize a corporation to take the place of yourself as "contractor" under this agreement.

This is to advise that when your corporation is complete and satisfactory to our counsel, you will have my consent to substitute the corporation as "contractor" in place of yourself.

Yours, truly,

T. P. SHONTS.

[Telegram.]

WASHINGTON, D. C., September 8, 1905.

J. E. MARKEL,
17 National Bank Building, Omaha, Nebr.:

Stevens cables that charge fixed for board of gold men as against present charge will be very objectionable to many gold employees getting small salaries. Mr. Shonts cabled him that he will endeavor to arrange with you to furnish such gold employees as want them good but simpler meals at lower charge, thus making two rates for gold employees. It will be to your advantage to make such arrange-

ments, and we should have thought of it. Please wire me your views and what you can do. They are now paying twenty-two fifty for board and two fifty for care of room.

ROSS.

[Telegram.]

CHICAGO, September 9, 1905.

D. W. ROSS,
*Purchasing Agent, Isthmian Canal Commission,
Mills Building, Washington, D. C.:*

Your Omaha wire. Tell Mr. Shonts that I will meet views of himself and Mr. Stevens on any proposition which appears advantageous. Can and will arrange two rates if deemed advisable. Home to-night.

J. E. MARKEL.

NEW YORK, September 22, 1905.

THEODORE P. SHONTS, Esq.,
President Panama Railroad Company, New York City.

DEAR SIR: Referring to the contract of September 7, 1905, between the company and myself, it is further agreed between the company and myself, for valuable consideration received, that, independent of and in addition to any provision of said contract, the company shall have the right hereby accorded to wholly terminate and annul said contract at any time, at the discretion of its president.

Yours, truly,

J. E. MARKEL.

Witness:

WM. NELSON CROMWELL.

PANAMA RAILROAD COMPANY, PANAMA RAILROAD,
PANAMA RAILROAD STEAMSHIP LINE,
New York, September 23, 1905.

Mr. J. E. MARKEL,
24 State Street, City.

DEAR SIR: Following the conference between yourself, Mr. Cromwell, and myself yesterday, in which we reached a supplemental provision to be incorporated in the draft of the 7th instant, I beg for uniformity's sake to confirm my acceptance of the same and inclose you a copy of it. We will take up this subject very fully on our forthcoming visit to the Isthmus.

Yours, truly,

T. P. SHONTS.

Figures showing the average of each day's operations during the month of September.

Statement of issues to kitchen and dining room, averaged per diem.....	\$112.514
Statement of labor roll, averaged per diem.....	\$28.18
Statement of meals furnished, averaged per diem.....	440.3
Statement of coupons collected for care of rooms, averaged per diem.....	20.6

REPORT OF THE ISTHMIAN CANAL COMMISSION. 408

[Memorandum.]

Average daily cost of hotel.....	\$140.694
Average daily number of coupons collected	460.8
Average cost of each meal.....cents..	30.53

BRANCH OF LABOR AND QUARTERS,
ISTHMIAN CANAL COMMISSION'S HOTEL,
Culebra, October 3, 1905.

Mr. JACKSON SMITH,
Manager Branch of Labor and Quarters, Panama.

SIR: I beg to submit my preliminary report for the month of September, 1905:

INCOME.

11,713 coupons.....	\$2,928.25
Cash received	130.50
To be deducted during this and next month.....	397.25
Loss.....	764.85
	<hr/> 4,220.85

EXPENDITURES.

Stores.....	\$3,375.45
Salaries.....	845.40
	<hr/> 4,220.85

The distribution of the income is as follows:

For meals:	
Cash	\$126.75
Coupons.....	11,208
To be deducted	\$373.50
For care of rooms:	
Cash	\$3.75
Coupons.....	505
To be deducted	\$23.75

The total income represents an equivalent of 13,824 coupons.

Very respectfully,

_____, *Hotel Manager.*

ISTHMIAN CANAL COMMISSION,
Panama, October 9, 1905.

Mr. J. E. MARKEL,
Ancon, Canal Zone.

DEAR SIR: Referring to the agreement recently entered into between you and the Panama Railroad Company, under which certain hotel and other privileges were granted you by the railroad company, in view of the unsettled conditions found to exist on the Isthmus, and which have been fully discussed with yourself, beg leave to confirm our verbal notice given you to-day of our desire to forthwith terminate the above-mentioned agreement.

Yours, truly,

T. P. SHONTS,
President.

STEAMSHIP HAVANA, Colon, Panama, October 10, 1905.

Mr. T. P. SHONTS, *Chairman*.

DEAR SIR: The attached report furnished me by Mr. Smith shows that at the Culebra Hotel there were served during the month of September 13,824 meals, costing \$4,220.85, or 30.53 cents per meal, or \$27.47 per man per month.

To this should be added the manager's salary (omitted), coupon or hotel clerk (omitted). General office expense: General manager, chief clerks and assistants, purchasing agent, inspectors, traveling auditors, storekeeper and helpers, supply car messenger, traveling cook, foreman bakery and helpers, butcher, extra managers and cooks. Pack train, depot to hotel; coal, laundry, lights, cost of refrigerating cars, rent of storeroom, Colon; transportation help, steamers, New York to Colon and return, for vacations; freight on railroad, Colon to destination; insurance; breakage and loss, silver, glassware, and linen; repairs on ranges, furniture, and equipment; expense of sanitation and removal of garbage and keeping of premises clean outside of buildings.

Very truly, yours,

COLON, PANAMA, October 11, 1905.

Hon. T. P. SHONTS, *Chairman*.

DEAR SIR: Referring to my letter to you of October 10, in making up a list of the expenses chargeable from a contractor's standpoint, I omitted railroad fares for all employees of the contractor. If it is intended to make a charge to the contractor for his inspectors, superintendents, and other employees, then, in that case, it should be considered in making up the estimates of your expenses.

Very truly, yours,

SAMPLE MENUS SUBMITTED.

SUNDAY.—*Breakfast*: Baked apples, cream; broiled fish, hot waffles; mutton chops, fried potatoes; bread and butter; coffee, tea, or cocoa. *Dinner*: Chicken soup; boiled turkey or chicken, oyster sauce; roast ham, champagne sauce; prime ribs of beef; bread and butter; green peas, mashed potatoes; ice cream, home-made cake; mixed fruits, nuts and raisins; coffee. *Supper*: Pork and beans; cold cuts of meat; rolls and butter; canned peaches; home-made cake; crackers and cheese; coffee, tea.

MONDAY.—*Breakfast*: Grape fruit; boiled rice, cream and sugar; scrambled eggs with bacon, hot corn bread, rolls; bread and butter; boiled salt mackerel; coffee, tea, or cocoa. *Dinner*: Barley broth; boiled fish, egg sauce; roast mutton, caper sauce; banana fritters; succotash; baked yams; bread and butter; home-made pie, cheese, coffee, tea. *Supper*: Farina, cream, sugar; assorted cold meats; potato croquettes; hot cake; coffee, tea.

TUESDAY.—*Breakfast*: Sliced fruit with cream; cereal; fried fish; beefsteak, German fried potatoes; muffins; bread and butter; coffee, tea, or cocoa. *Dinner*: Vermicelli soup; fish; veal cutlet; mashed potatoes, spaghetti au gratin; boiled spinach peach roly-poly, vanilla sauce; crackers and cheese; coffee, tea. *Supper*: Boiled Indian meal; curry of lamb; baked potatoes; mixed pickles; rolls and butter; nut cake, raspberry jam; coffee, tea.

WEDNESDAY.—*Breakfast*: Apples; cream of wheat; eggs, as they like; liver and bacon; wheat cakes with sirup; coffee, tea, or cocoa. *Dinner*: Mock turtle soup; fried fish; beef a la mode with dumplings; boiled onions, string beans; lemon ice-

pudding; coffee, tea. *Supper:* Hominy; cold roast lamb, chipped beef; creamed potatoes, pickled beets, chowchow; preserved apricots; crackers, cheese; coffee, tea.

THURSDAY.—*Breakfast:* Grape fruit, bananas; cereal; Spanish mackerel; mutton chops, lyonnaise potatoes; hot corn bread; tea, coffee, or cocoa. *Dinner:* Split pea soup; baked fish, tartar sauce; chicken fricassée; sirloin steak; baked potatoes, olives; stewed tomatoes; ice cream, cake; coffee, tea. *Supper:* Wheaten grits; Hamburg steak; bacon and lamb's kidneys; German fried potatoes; French toast; stewed prunes; bread and butter; coffee, tea.

FRIDAY.—*Breakfast:* Flaked rice, with canned peaches; cod fish cakes, tomato sauce; omelet with hacon; Vienna rolls, butter; coffee, tea, or cocoa. *Dinner:* Puree of tomato soup; baked spaghetti, baked fish, stuffed—prime ribs of beef; mashed turnips, green peas, boiled beets; bread and butter; cornstarch pudding; coffee, tea. *Supper:* Force with cream; Pickled fish, table celery; Frankfurt sausage, sauerkraut; stewed peaches; johnnycake; crackers and cheese; coffee, tea.

SATURDAY.—*Breakfast:* Fruit; cold boiled rice, cream, sugar; mutton chops, frizzled beef with eggs; rolls and butter; coffee, tea, or cocoa. *Dinner:* Mutton barley broth, fried fish; steak, fried onions; boiled potatoes, spinach; cornstarch custard; mixed fruits; coffee, tea. *Supper:* Boiled Indian meal, sirup; cold corned beef, veal chops, breaded; molasses cake, Graham crackers; canned peaches; coffee, tea.



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**CORRESPONDENCE BETWEEN THE SECRETARY OF WAR AND
THE ATTORNEY-GENERAL CONCERNING THE SETTLEMENT OF
THE MARKEL CONTRACT.**

JANUARY 2, 1906.

MY DEAR MR. ATTORNEY-GENERAL: I desire to submit for your opinion a question arising on the following facts:

The Government of the United States obtained, in the purchase from the New French Panama Canal Company, about 69,000 shares of the 70,000 shares of capital stock of the Panama Railroad Company, which is a corporation of the State of New York, authorized to do business as a common carrier on the Isthmus of Panama, and having a concession for that purpose from the sovereign of the country at the time when the corporation was chartered and the railroad was built. Since the purchase from the New French Panama Canal Company the Government has purchased the remainder of the outstanding shares in the railroad company and is now the owner of 70,000 shares, less 13 shares, which have been sold to 13 persons, in order that they might qualify as directors under a contract for a resale whenever the Government shall elect.

The Canal Commission, in making its preparatory arrangements for the construction of the canal upon the Isthmus, in organizing its sanitary force to stamp out the yellow fever and malaria, and in the necessary enlargement and improvement of the equipment of the Panama Railroad Company, and the construction of a great mileage of branch tracks for the removal of material in the excavation of the canal, in the dredging out of the harbors at both ends of the canal, in the construction of houses for laborers, of warehouses, machine shops, wharves, and all manner of buildings necessary in the great work to be done in building the canal, employed persons engaged in engineering, clerical, and manual labor of various kinds divided into two classes, paid, as it is said, on the "gold roll" and on the "silver roll."

This number increased so rapidly that the question of their obtaining on the Isthmus proper food became a matter of very serious consequence, and accordingly Mr. Wallace wrote a letter to Mr. J. E. Markel, who had been well known for a great many years as an experienced hotel keeper, boarding-house keeper, and caterer for boarding camps, inviting him to come to the Isthmus with a view to possibly obtaining a concession from the Canal Commission and making a contract for the feeding of the two classes of employees at fixed prices. The letter was written on the 4th of March and was lost in the mails, but finally reached the addressee, so that it was answered on the 4th of May. Mr. Markel accepted the suggestion and at once began to make inquiries, obtain plans for proper refrigerating plants, proper laundry plants, and other equipment needed for the work. The plant

contemplated feeding of upward of 20,000 or more people. Mr. Markel visited the Isthmus with the plans, conferred with Governor Magoon, who was a Commissioner and a member of the executive committee resident on the Isthmus, conferred with the engineer of the Panama Railroad Company, advised as to where the refrigerator plants should be placed, as to where the hotels should be constructed, as to where the boarding camps should be located, and advised as to all other questions arising with reference to the feeding of the employees.

With his son and partner, P. L. Markel, and his private secretary, he spent six weeks upon the Isthmus and returned about the 8th of August, 1905. He had taken observations and made notes with reference to the character of the work which would have to be done, and with a view to making a contract with the Government therefor. Mr. Shonts returned about the 14th of August from the Isthmus, where he had been conferring with reference to the matter, and after a full investigation decided to advertise for bids for the contract. Advertisements were made and competition invited. The result of the competition was that on the 7th of September the contract was awarded to Mr. Markel.

The contract in effect, shortly stated, provided that the Government should furnish substantially all the plant, houses, and everything of a permanent character to the contractor for a certain rent; that the contractor should furnish the employees and the material for food; that he should pay a certain amount for transportation and for refrigeration, and that on the other hand he should receive for the meals which he furnished a certain price from those on the "gold roll" and a certain price for those on the "silver roll." It also contained the provision that in case the contractor did not discharge his duty in accordance with the contract, to the satisfaction of the general manager of the railroad, the general manager might cancel the contract after a notice of thirty days. After the contract was awarded Mr. Markel ordered to New York 12 persons—cooks, superintendents, clerks, and skilled men in the hotel and restaurant and boarding-camp business—in order that they might sail with him immediately for the Isthmus and begin the work.

One man who was in the employ of Armour & Co. he entered into a contract to pay \$5,000 a year, because of his familiarity with the refrigeration and preservation of meats in the Tropics. When he reached New York he found that Mr. Shonts had received a telegram from Chief Engineer Stevens objecting to the prices in the contract, and Mr. Shonts thereupon insisted that if they found when they visited the Isthmus that the prices were too high he must have the right to cancel the contract at his discretion. Accordingly the following addition to the contract was made:

NEW YORK, September 22, 1905.

THEODORE P. SHONTS, Esq.,

President Panama Railroad Company, Washington, D. C.

DEAR SIR: Referring to the contract of September 7, 1905, between the company and myself, it is further agreed between the company and myself for valuable consideration received, that independent of, and in addition to, any provisions of said contract, the company shall have the right hereby accorded to wholly terminate and annul said contract at any time at the discretion of the president.

Yours, truly,

JACOB E. MARKEL.

Witness:

WILLIAM NELSON CROMWELL.

It recites that it is for a valuable consideration, but no money or other valuable consideration was in fact paid. Whether the joint agreement to modify the contract constitutes a sufficient consideration, is submitted for your consideration, with the final question which I am about to put. Because of the doubt as to whether the men whom he had employed and summoned to New York would be actually needed, suggested by the introduction of this new clause, Mr. Markel left all but three of the men in New York and took those three with him. After visiting the Isthmus and after discussing the ways and means, the cost of feeding, etc., it was concluded by Mr. Shonts and Mr. Stevens and Governor Magoon, that the contract ought to be canceled, and thereupon, in accordance with the additional modification above quoted, notice of the cancellation was given and accepted.

At the time this was done Mr. Shonts and Governor Magoon, members of the executive committee of the Commission and directors of the railroad, said to Mr. Markel that he ought to be compensated for the expense to which he had been put and for his time and services in connection with the work which the Government then concluded to assume to do itself instead of letting it by contract. On their return the employees who had been boarded by Mr. Markel in New York were discharged. The superintendent whom he had employed at \$5,000 a year was settled with for \$1,000, and his claim was presented by President Shonts to the directors of the railroad company, showing that he had expended about \$1,500 before the contract was let to him, and the remainder of \$5,745 after the contract had been let to him.

Mr. Markel states that had he been permitted to carry out the contract he would have made no charge either for his services or for those expenses which he had incurred, but that in view of the cancellation of the contract he was out \$5,745 and the time which he had spent, from about the 4th of May to the 17th of November, when he returned from the Isthmus, including two trips to the Isthmus, one of six weeks and the other of about three weeks. The railroad directors, upon this statement, voted to him his expenses, and a sum of \$5,000 in compensation for his time and the service rendered by him from his suggestion and advice as an expert to the railroad company concerning its action in respect to feeding the laborers.

Now, it may be contended with force that under these circumstances, from a strictly legal standpoint, there was no legal consideration to support the payment to Mr. Markel of his expenses and for his services, because in the examination which I have subjected him to he freely admits that the services were rendered, the expenses were incurred, and his time taken solely in anticipation of obtaining a contract for the purpose, and that had he obtained the contract and been permitted to carry it out he would not have charged a cent of this to the Government. The railroad directors evidently considered that the modification of the contract, which was insisted upon after hearing from Mr. Stevens, was a harsh and burdensome one, and that Mr. Markel ought not to be held to the letter of that modification so as to prevent his requesting compensation for his useless outlay of money and time and his being made whole in the transaction. The question of the payment was not submitted to me or to the President, but it was ordered by the board of directors. It now arises upon my examination of the transactions of the railroad company and assumes this phase:

In view of the meritorious and moral consideration upon which the money was paid, though the consideration may probably have no strictly legal basis, is the President justified in ratifying and confirming the action of the board of directors? The evidence satisfies me after a full cross-examination of Mr. Markel that the expenses which he states were actually incurred by him and the \$5,000 for the time and trouble which he spent, if rendered as a service to the company, in view of his very great expert knowledge, was not excessive.

Very respectfully, yours,

WM. H. TAFT,
Secretary of War.

Hon. WM. H. MOODY,
Attorney-General.

OFFICE OF THE ATTORNEY-GENERAL,
Washington, D. C., January 2, 1906.

DEAR MR. SECRETARY: You ask my opinion upon a question stated in your letter of this date to me. Without recapitulating the facts which are fully set forth in your letter, the question is whether upon those facts the President is justified in approving a certain payment to Mr. Markel on account of services and expenses which were rendered and incurred prior to and during the existence of a contract made with the Panama Railroad Company for furnishing food to certain employees. It seems to me that it is not necessary for me to determine whether Mr. Markel has a claim against the railroad company which could be enforced in a court of law. It is sufficient to say that his rights are doubtful, or, what is equivalent, to say that the liability of the railroad company to him is doubtful.

The contract which was made between the railroad company and Mr. Markel was not canceled by virtue of any provision contained in it, but by virtue of a subsequent and independent agreement, without consideration, made in the letter to Mr. Shonts. In such case a private person or a corporation would be justified in paying to Mr. Markel such a sum of money as seemed in equity and good conscience to be due him, and the payment would constitute a compromise of a doubtful claim. In view of the large powers conferred upon the President by law with respect to the building of the canal and all the work incidental thereto, in my opinion he is justified in ratifying and in confirming the action of the board of directors, approving the payment of the sum named to Mr. Markel.

Very respectfully,

W. H. MOODY.

Hon. WILLIAM H. TAFT,
Secretary of War.

REPORT OF THE BOARD OF DIRECTORS OF THE PANAMA
RAILROAD COMPANY TO THE ISTHMIAN CANAL
COMMISSION FOR THE TEN MONTHS
ENDING OCTOBER 31, 1905.

Board of directors.—T. P. Shonts, Charles E. Magoon, Mordecai T. Endicott, Peter C. Hains, B. M. Harrod, Oswald H. Ernst, Wm. Nelson Cromwell, J. D. de Obaldia, William Barclay Parsons, Clarence R. Edwards, Roger L. Farnham, E. A. Drake, John F. Wallace (resigned).

Executive committee.—T. P. Shonts, John F. Wallace (resigned), Charles E. Magoon, Wm. Nelson Cromwell, Clarence R. Edwards.

Officers.—T. P. Shonts, president, New York; John F. Wallace (resigned), vice-president, New York; John F. Stevens, general manager, Panama; Sullivan & Cromwell, general counsel, New York; E. A. Drake, secretary and treasurer, New York; T. H. Rossbottom, assistant secretary, New York; Sylvester Deming, assistant treasurer, New York; E. S. Benson, general auditor, New York; John Adams, auditor, New York; M. Delevante, local auditor, Colon; R. L. Walker, traffic manager, New York; D. W. Ross, general purchasing officer, New York; Alfred Anderson, assistant purchasing and shipping officer, New York; W. G. Bied, superintendent, Colon; P. G. Baker, master mechanic, Colon; F. E. Watson, engineer of maintenance of way, Colon; H. I. Bawden, terminal superintendent, New York.

General offices.—No. 24 State street, New York.

PANAMA RAILROAD COMPANY,
New York, December 28, 1905.

The ISTHMIAN CANAL COMMISSION:

I respectfully submit for your consideration a report of the company's financial condition and operation for the first ten months of the year 1905 in advance of the full report to the annual meeting of the company's shareholders in April of each year.

I call attention to the accompanying exhibits showing income and profit and loss account, general balance sheet, and statistical tables, which will give you the detailed information upon the financial aspects of the company's business:

Capital stock issue (unchanged)	\$7,000,000.00
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The present outstanding bond issues are:

Sinking fund 6 per cent subsidy bonds—

Original issue of	3,000,000.00
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(For payment in advance of the annual subsidy of \$225,000 to the Republic of Panama.)

Redeemed by annual sinking fund drawings, including \$183,000 drawn for redemption in 1905	2,467,000.00
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Outstanding at this date	533,000.00
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Of those outstanding 100 were purchased out of earnings and are owned by the company	100,000.00
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Leaving in the hands of the public	433,000.00
--	------------

Through the operation of the sinking fund this indebtedness will be redeemed in 1908.

First mortgage 4½ per cent 20-year gold bonds—

Authorized issue of	4,000,000.00
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Held by the public	\$2,879,000.00
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Redeemed by annual sinking fund drawings, including \$140,000 drawn in 1905	1,121,000.00
	4,000,000.00

Through the operation of the sinking fund this indebtedness will be reduced by 1917, the date of the mortgage, to \$1,199,000. It is the only mortgage lien upon the company's property.

Of the 647 first mortgage 4½ per cent 20-year gold bonds shown to be in the company's treasury, 19 were redeemed by trustees through sinking fund on November 18, 1905. On account of the Isthmian Canal Commission being unable to promptly liquidate its indebtedness to the railroad company the remaining 628 bonds were sold on November 24, by authority of the board of directors, dated November 8, 1905, the proceeds to be used in the payment for new equipment and improvements to the company's property, which are necessitated by an increasing demand upon its facilities, due to active resumption of canal construction. Since the sale of these bonds, it has been decided that the Isthmian Canal Commission will advance sufficient funds on account of its indebtedness to the railroad company to enable it to buy

back the 628 bonds, it having an option to do so at the price sold with accrued interest. Of the 628 bonds, 606 have been repurchased and are in the company's treasury. Mackay & Co., to whom the bonds were sold, have agreed to secure the return of the balance of 22 bonds and deliver to the railroad company at the price of 105 (selling price) and accrued interest.

The result of the company's operations for the period covered by this report show that after payment of all fixed charges and cost of operation there remain net earnings of \$354,248.50, or somewhat in excess of 5 per cent on the capital stock.

Out of the accumulated earnings to December 31, 1904, the directors on January 30, 1905, declared a dividend of 5 per cent, which was paid February 1, 1905.

Gross revenue receipts, expenditures, and net earnings for ten months ending October 31, 1905, compare, as under, with those of the same period for 1904:

	Earnings.	Operating expenses.	Earnings over operating expenses.
1905.....	\$3,077,611.28	\$2,319,985.62	\$757,625.66
1904.....	2,541,099.10	1,640,579.89	900,519.21
Increase in 1905.....	536,512.18	679,358.73	
Decrease in 1905.....			142,846.55

EARNINGS.

RAILROAD.

The total earnings of the railroad for the transportation of all kinds of traffic show an increase of \$302,204.10, or 18.77 per cent over ten months of previous year. Of this increase in revenue, \$198,624.15 was derived from merchandise and coal freight, \$204,542.73 being increase on westbound business and \$5,918.58 decrease on eastbound business. Passenger earnings increased \$43,691.97 and mail earnings decreased \$2,434.83.

Freight traffic from New York and New Orleans to South Pacific ports increased 3,375 tons; to Central America and Mexico 6,855 tons, and to Panama 6,794 tons. From Europe to Central America and Mexico there was an increase of 5,081 tons and to South Pacific ports an increase of 3,988 tons.

The decrease in tonnage from Central America and Mexico to Europe was 6,075 tons and from South Pacific ports to Europe 9,951 tons.

The following table shows the freight tonnage carried over the railroad for ten months ending October 31, 1905, as compared with the same period of 1904:

	1905.	1904.	Increase.
	Tons. (a)	Tons. (a)	Per cent.
Carried westbound	287,577	187,936	53.02
Carried eastbound	156,653	151,526	3.23
Total west and east bound	444,230	339,462	30.80

aTon of 2,000 pounds, or 40 cubic feet.

REPORT OF THE ISTHMIAN CANAL COMMISSION.

415

The gross earnings per ton moved on the road for ten months ending October 31, 1905, compare as follows:

	1905.	1904.	Decrease.
Westbound.....	\$3.29	\$3.69	<i>Per cent.</i> 10.84
Eastbound.....	3.07	3.16	2.86
Average west and east bound.....	3.21	3.45	6.96

Exhibit L, accompanying this report, shows the origin and destination of the freight carried over the railroad.

The total revenue freight traffic of the railroad during the ten months ending October 31, including both merchandise and coal, was 406,840 tons, an increase of 85,812 tons, or 26.73 per cent. The total revenue derived from this traffic was \$1,306,145.92, an increase of \$198,624.15, or 17.93 per cent.

In addition to the above freight, 37,390 tons of company's freight and 1,278 tons of mails and excess baggage were hauled.

Of the total freight tonnage carried, 64.74 per cent was westbound and 35.26 per cent eastbound. In 1904 the percentages were 55.36 per cent and 44.64 per cent, respectively.

The through traffic was 66.09 per cent of the total tonnage handled, as against 82.90 per cent for ten months of 1904.

Coal (including company's) comprised 36.04 per cent of the local traffic westbound.

The following statement shows the number of passengers carried and the passenger earnings.

Classification.	Number of passengers carried.			Passenger earnings.		
	1905.	1904.	Increase.	1905.	1904.	Increase.
First-class passengers.....	66,248	10,431	<i>Per cent.</i> 535.11	\$56,608.49	\$41,405.68	<i>Per cent.</i> 36.72
Second-class passengers.....	206,916	75,442	174.27	72,554.70	44,065.54	64.65
Total.....	273,164	85,873	218.10	129,163.19	85,471.22	51.12

Average receipt per passenger.

Classification.	1905.	1904.	Decrease.
First-class passengers:			<i>Per cent.</i>
Through.....	\$4.90	\$8.95	45.25
Local.....	.61	2.48	75.40
Second-class passengers:			
Through.....	4.41	4.78	7.74
Local.....	.32	.49	34.69

The gross revenue from the transportation of passengers was \$129,163.19, an increase of \$43,691.97, or 51.12 per cent, while the number of passengers carried show an increase of 187,291, or 218.10 per cent.

The revenue received from through passengers decreased \$3,372.10, or 11.37 per cent, and the number of passengers increased 1,424, or 34.61 per cent, as compared with ten months of last year. In February the through rate of first-class passengers was reduced from \$10 to

\$6.50, and for second-class passengers from \$5 to \$4.50, thus accounting for the decrease in earnings as compared with increase in number of passengers carried.

Local passengers show an increase of \$47,064.07 in revenue, or 84.38 per cent, and 185,867 in number carried, or 227.34 per cent. This large increase is due to resumption of work on canal.

STEAMSHIP LINES.

The total earnings of the company's steamship line were \$1,165,058.38, an increase of \$234,308.08, or 25.17 per cent, over the previous year, all classes of traffic showing important increases.

Freight traffic increased 49,743 tons, or 33.29 per cent, and the revenue therefrom increased \$149,250.08, or 23.28 per cent.

Passengers show an increase of 2,874 in number carried, or 62.07 per cent, and an increase in earnings of \$60,846.30 or 32.35 per cent.

The increase in revenue from the transportation of mails was \$15,095.77 or 17.31 per cent.

Of the total tonnage transported 92,550 tons were carried by the company's steamers and 106,629 tons by chartered steamers. In the ten months ending October 31, 1904, the former carried 66,692 tons and the latter 82,744 tons.

MISCELLANEOUS RAILROAD RECEIPTS.

The total receipts of the several accounts grouped together under this heading amounted to \$362,764.78, an increase of \$52,923.03, or 17.08 per cent, over first ten months of previous year.

The receipts for wharfage at Panama and La Boca and lighterage of cargo in Panama Bay, which are included above, show a decrease of \$6,085.34.

EXPENDITURES.

The operating expenses for the ten months ending October 31, 1905 and 1904, compare as under:

	1905.	1904.	Increase.
Railroad	\$1,213,610.35	\$813,347.46	\$400,262.89
Steamship line	1,106,328.27	827,232.43	279,095.84
Total	2,319,938.62	1,640,579.89	679,358.73

This table shows an increase of \$679,358.73 in total operating expenses, while there was an increase in total earnings of \$536,512.18. (See pp. —.)

RAILROAD.

CONDUCTING TRANSPORTATION.

The expenses of this department, compared with first ten months of 1904, show an increase of \$286,046.22, or 81.83 per cent, while the total tonnage moved increased 104,766 tons, or 30.86 per cent.

For a period there was a serious interruption in the transportation of cargo over the road both ways, due to exceptional causes:

First. To an increase in the quantity of material and supplies carried to the Isthmus from all points, sufficient in quantity to overtax the utmost capacity of the railroad's equipment, accompanied by a lack of skilled mechanical and unskilled negro labor, which labor for a time was practically unobtainable.

Second. At the most acute stage of this disturbance a strict quarantine was temporarily established at Panama because of two supposed cases of bubonic plague, as a result of which resident consuls refused clean bills of health to vessels leaving for their home ports. Consequently, large accumulations of cargo at our terminals developed until the congestion became so acute that even the lifting of the embargo did not afford immediate relief.

As the accumulated result of these conditions, the movement of freight on and over the company's docks at Colon was greatly delayed, and, owing to the great lack of proper motive power and other equipment, the same state of affairs extended over the railroad and its terminals at La Boca.

Only by the most strenuous efforts of the operating officials and abnormal expenditures, both on docks and in all lines of transportation, was the movement of cargo restored to normal conditions. With the advent of the season of heavy movement of coffee, which promises to exceed that of any previous season, it is feared that, until new equipment is received, some delays may occur, as the peculiar business of the road is so far in advance of its facilities that it is beyond the power of any human being to handle it with any regard to economy, although all preparations have been made and all precautions possible taken.

MAINTENANCE OF EQUIPMENT.

The total charges or expenses under this heading amounted to \$118,673.45, an increase of \$16,084.42, or 15.68 per cent, as compared with the previous year.

Under plans in hand inaugurated early in 1905, for improving the company's facilities, contracts have been placed for 24 engines, 500 box cars, 10 refrigeration cars, 6 passenger cars, 12 caboose cars, 2 wrecking cranes, 1 locomotive crane, and 1 pile driver, providing for delivery of such equipment not already on the Isthmus early in the coming year.

MAINTENANCE OF WAY AND STRUCTURES.

The track, bridges, and all structures have been maintained in first-class condition at an expenditure of \$207,215.11, an increase of \$108,675.39, or 110.29 per cent.

The relaying of new 70-pound steel rail has continued, and by December 31, 1905, all main line will be so relaid and all light worn rail will be removed. The replacement of worn frogs and switches has gone ahead, and modern switch lights have been supplied for all main line switches, enabling increased traffic and a larger number of trains to be handled at higher speeds with a much greater degree of safety.

A new switching yard has been planned and is now under construction at Colon. Work on the new shops at the same place is progressing,

and the completion of the two latter improvements will enable repairs to a larger amount of equipment to be made, and more quickly and economically than can at present be done, and will admit of the abandonment of the obsolete and inadequate plant now in use.

New sidings and spur tracks have been laid at various points to care for the present and prospective business of the Canal Commission, and many other such improvements will be needed in the future.

The work of double tracking the main line has progressed slowly, owing to lack of laborers. It is now, however, going ahead and a fair rate of progress is expected from this date.

Additional facilities, such as modern locomotive coaling plants, water stations, track scales, etc., are planned, and material for the same has been purchased and is now partially on the ground.

A new telegraph and telephone line is now under construction the entire length of the road. This line is being built in the most permanent manner, and although only about one-third completed it has already demonstrated its great value and absolute necessity.

The extension of electric lighting from the company's plants at Colon and La Boca to hospitals quarters and other buildings of the Isthmian Canal Commission has continued rapidly, until at the latter point particularly a duplication of the present electric generating plant must be made in the immediate future, both to afford necessary current for lighting and for the operation of modern hoisting cranes, which will be installed on the new dock at that place.

A temporary cold-storage plant has been installed at Colon for use until a large permanent refrigeration plant, now under construction, is completed.

The general condition of the property has improved, and with the completion of the improvements now in progress and outlined, and the addition of equipment now under contract, will enable traffic to be handled with a reasonable degree of satisfaction; but conditions which prevailed during the current year and now exist absolutely prohibit any intelligent attempt to do more than keep the traffic of the road moving somehow, without any particular regard to economy of operation.

STEAMSHIP LINE.

The operating expenses of the steamship line were \$1,106,328.27, an increase of \$279,095.84, or 33.74 per cent over the previous year.

The growth of the steamship traffic warranted the increasing of its facilities. The ships owned by the company, namely, the *Advance*, *Finance*, and *Alliança*, with such vessels as it was able to charter, were inadequate and unsuited for the proper handling of the large traffic offering.

After extended investigation in England and the United States looking for vessels suitable for the needs of the company, the Isthmian Canal Commission purchased from the New York and Cuba Mail Steamship Company the steamers *Mexico* and *Havana*, of 4,500 tons each, dead weight capacity, which had been in service between New York and Cuban ports, these vessels appearing to be the most suitable for the needs of traffic that could be readily and economically secured. These two vessels have been chartered to the railroad company at the rate of 4 per cent per year on a valuation of \$656,000 each, with 4 per

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cent additional to cover depreciation, making an annual rental charge of \$52,480 each.

This adjustment of charter tonnage resulted in securing double the cargo capacity per ship at a reduced cost.

The steamers *Mexico* and *Havana* have been equipped with refrigeration plants of good capacity in which perishable stores can be carried to Colon to be transferred to the refrigeration plant there, and later distributed to the employees along the line of road by means of refrigerator cars.

The *Mexico*, *Havana*, and *Alliança* have been equipped with the Atlantic-De Forrest wireless system of telegraphy and are by that means in almost constant and direct communication throughout their voyages with the company's offices at New York or Colon.

The effectiveness of this installation means an additional safeguard for the ships, their passengers and cargo, and is of distinct and material advantage to the operations of the company.

The larger tonnage carried by our steamship line out from New York is attributable to a gradual development in commercial traffic by our line and to an important growth in the bulk and quantity of material transported for the Isthmian Canal Commission, because of which latter an adjustment of rates on a more remunerative basis is under consideration.

The advisability of chartering one or two large cargo boats to carry heavy, bulky construction material and equipment to the Isthmus for the Commission and railroad company is under consideration.

MISCELLANEOUS RAILROAD EXPENSES.

The combined expenditures under this head, which include lighterage, docks and wharves, real estate, etc., amounted to \$177,514.41, a decrease of \$10,955.77, or 5.81 per cent.

The increase in number and size of vessels coming to the company's wharves at both terminals at the Isthmus necessitated prompt action for their enlargement. Accordingly two large piers have been constructed at Cristobal, and pier No. 4 at Colon has been nearly doubled in size so as to afford facilities for handling two of our steamers at one time, while at La Boca a new wharf 800 feet in length, with a basin adjoining of sufficient depth to afford safe berthing for large vessels, is approaching completion. The plan of construction contemplates such additions as may be required from time to time.

On June 1 last the company was relieved by the Isthmian Canal Commission of responsibility for large cost of operation to maintain depths in the maritime approach to basins adjoining the company's wharf at La Boca.

Incidental to this change was a retransfer to the Commission of a large floating equipment plant, together with the La Boca machine shops and the shipways at that point, previously leased to this company by the Commission.

GENERAL REMARKS.

During the period from 1894 to 1904, inclusive, and for ten months of 1905, the percentage of total expenses to gross earnings was as follows:

	Per cent.
1894	69.93
1895	61.63
1896	53.94
1897 (including taxes and appropriations for depreciation, etc.)	61.12
1898 (including taxes and appropriations for depreciation, etc.)	64.91
1899 (including taxes and appropriations for depreciation, etc.)	64.66
1900 (including taxes and appropriations for depreciation, etc.)	65.25
1901 (including taxes and appropriations for depreciation, etc.)	64.72
1901 (or including Pacific Line not operated in 1900)	76.34
1902 (including taxes and appropriations for depreciation, etc.)	65.87
1902 (or including Pacific Line operated for six months)	71.02
1903 (including appropriations for depreciation and special repairs)	66.01
1904 (including appropriations for depreciation and special repairs)	62.90
1905 (including appropriations for depreciation and special repairs), ten months	75.38

The quantity of cargo originating at European points and brought to the terminals of the railroad by foreign steamship lines has progressively increased.

Two important steamship lines—the Royal Mail Steam Packet Company and the Hamburg-American Line—which for many years have operated in connection with our company from European points, have established branches between New York and Colon, thereby largely increasing regular communication with the Isthmus to the material advantage of the shipping community.

There are strong indications that the Chilean and Peruvian Governments intend to establish or subsidize additional lines between their principal ports and Panama, so that by cooperation with the Panama Railroad Company more rapid and convenient communication may be maintained with the United States.

In furtherance of the company's newly declared policy to offer every inducement for the development of commercial traffic on the Isthmus, a material reduction has been made in local passenger and freight rates, while full authority has been placed in the hands of all cocarriers to fix competitive rates low enough at points of origin to secure business, an agreed percentage of such through rates to accrue to this company.

The Pacific Mail Steamship Company continues the company's only cocarrier in traffic originating at and destined to points on the Pacific coast north of Panama, notwithstanding this company has advertised open rates and announced its willingness to enter into traffic relations with any established line with regular sailings to and from the terminals at Panama and Colon.

The company's dock at New York has become entirely inadequate to the business of its steamship line. While no difficulty was experienced during the earlier operation of its smaller vessels on a weekly schedule, the addition of two large steamers to the line with a possibility that one or two large cargo boats may be required, calls attention sharply to the need for an enlarged terminal at this end.

A change in this direction will necessarily involve a large increase in expense, because of the scarcity of suitable docks obtainable on the North or East River fronts.

The company's lease of Pier 57 offers no basis for comparison with the cost of other wharves, as it is especially favorable to this company and could readily be sublet to advantage.

Offers have been received from owners of water fronts in Brooklyn, Staten Island, and Hoboken. They present many advantages, but none that are sufficient thus far to overcome the objections to ferriage for all passengers and a large portion of our cargo.

Nevertheless, the heavy expense to the company caused by the hiring of berthing facilities temporarily at other docks, demurrage on lighters and hire of tugs, together with added expense for piling, breaking down and repiling inward and outward cargo already placed on the dock so as to make space to load and discharge following vessels, makes the securing of larger dock room a pressing necessity, which calls for the most careful attention in order to procure what is required at the lowest possible cost.

Consequent upon active canal operations an increased demand for skilled and unskilled labor has occasioned an advance in the pay of nearly all grades of the company's employees on the Isthmus, and the cost of operations has thereby materially advanced.

The company's policy of securing large contingents of laborers from West Indian islands under contracts covering their pay, board, lodging, and medical attention while on the Isthmus, has been continued with favorable results.

Effective July 1, 1905, by agreement with the Isthmian Canal Commission, a monthly charge of \$3,000 was made, covering the transportation of all employees of the Commission engaged on business while traveling over the railroad, the agreement providing for readjustment of this charge as may be necessary, as the result of a record kept of employees transported.

A large part of the capacity of the company's steamers has been employed in the transportation of employees and material for the Isthmian Canal Commission.

The company has two classes of employees, who are respectively on its gold or silver pay roll. A large majority of the former are natives of this country, while the latter are natives of the Isthmus or West Indies.

To provide American gold and Panama silver in sufficient quantities in advance of regular pay days, an arrangement was made with a combination of local bankers by which the company's Isthmus drafts on New York are bought at stipulated figures and violent fluctuations in the price of exchange thereby prevented.

Active measures are in progress to improve the quarters provided for the company's employees in order to add to their comfort, and, to better facilities on the Isthmus for the care of sick or injured employees, the hospital plant of both the Commission and railroad have been combined under one management to mutual advantage.

Sanitary conditions are rapidly improving, with the result that the health of the company's employees has been as good if not better than in previous years.

The company's commissary department, which was temporarily transferred to the Isthmian Canal Commission, but later retransferred to this company, has been much enlarged in capacity and scope. All necessary food supplies and material are furnished employees of the railroad and Commission at a slight advance on invoice cost, while easy payment

is provided for through coupon books issued under proper authority to such employees in advance of regular pay days; it is provided that the coupons may be accepted by resident merchants and traders and the company agrees to redeem them on presentation at its office.

The company's arrangements for the purchase and inspection of materials and commissary supplies have developed to meet the needs of an increasing personnel and population at the Isthmus.

Because of the inadequacy of the company's facilities on the Isthmus for housing and feeding the largely increasing number of its employees and those of the Isthmian Canal Commission, and because of the inability of resident merchants and trades people to meet the deficiency, and because of the discontent and ill health resulting to the employees from such a condition, it became urgently necessary to take active measures for relief. To that end a contract was awarded after competitive bids to Mr. J. E. Markel, by which the company undertook to and did provide along the line of road, hotels and other buildings as necessary and to thoroughly furnish and equip them for immediate occupancy and to thereafter turn them over to the contractor, he to bind himself to maintain the plant and to charge certain rates to Commission and railroad employees for lodging, board, and services.

Soon thereafter the contractor was prepared to fulfill his part of the agreement, but, owing to a rapid improvement in its commissary facilities, the company was able to provide for all its employees at a less cost to them than would have been the case under the contract. The company therefore availed of its right to give notice of cancellation of the contract to Mr. Markel, who was thereafter reimbursed his expenses and compensated for his expert service, which had been availed of by the company in the preparation of plans for its permanent cold-storage plant and in the development of the existing method of caring for its employees. The text of the contract is shown as an exhibit to this report.

Notwithstanding a continued growth in volume of the company's business, with an attendant increase in its clerical forces, general expenses show a material reduction thus far in 1905 as compared with the same period for previous years.

The company's relations with the Republic of Panama through its executive and administrative officers have remained undisturbed and are most friendly in character.

During the year the United States Government has become the sole owner of the capital stock of the company, all of which now stands in the name of Hon. W. H. Taft, Secretary of War, except a qualifying share in the name of each of the directors.

The company's entity and autonomy have been strictly preserved for good business reasons.

In June last Mr. John F. Wallace resigned his positions as vice-president and general manager, whereupon Mr. John F. Stevens was appointed general manager and Mr. W. G. Bierd superintendent of the railroad.

The thanks of the board are due the employees in all departments for the faithful and efficient services rendered during the year.

Respectfully,

T. P. SHONTS, *President.*

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PANAMA RAILROAD COMPANY, ACCOUNTING DEPARTMENT,
New York, N. Y., December 20, 1905.

Mr. T. P. SHONTS, Esq.,
President Panama Railroad Company, 24 State Street, New York City.

DEAR SIR: I herewith submit statements of income account, general balance sheet, and tables showing results of operations for ten months ending October 31, 1905, as follows:

- A.—Income account and profit and loss account.
- B.—General balance sheet.
- C.—Statement of earnings and expenses for ten months ending October 31, 1905 and 1904.
- D.—Statement of operating expenses of railroad for ten months ending October 31, 1905 and 1904.
- E.—Statement of operating expenses of steamship line for ten months ending October 31, 1905 and 1904.
- F.—Statement of expenditures for improvements and construction for ten months ending October 31, 1905.
- G.—Statement of steamer and tug depreciation account.
- H.—Statement of classified railroad earnings, tonnage, and passengers, Colon to Panama and Panama to Colon.
- I.—Statement of railroad freight statistics for four months ending October 31, 1905.
- J.—Statement of railroad passenger statistics for four months ending October 31, 1905.
- K.—Statement of railroad general statistics for four months ending October 31, 1905.
- L.—Statement of railroad freight tonnage handled.
- M.—Statement of steamship statistics for ten months ending October 31, 1905.
- N.—Statement of locomotive and car equipment.
- O.—Statement of floating equipment.

The compilation of statistics shown in Exhibits I, J, and K was begun with the month of July, 1905, which accounts for four months only being shown.

Yours, very truly,

E. S. BENSON, General Auditor.

EXHIBIT A.—Income account and profit and loss account for ten months ending October 31, 1905.

INCOME ACCOUNT.

Railroad:	
Gross earnings from operation.....	\$1,912,552.90
Operating expenses	1,213,810.35
Net earnings from operation	\$698,942.55
Steamship line:	
Gross earnings from operation.....	1,165,058.38
Operating expenses.....	1,106,328.27
Net earnings from operation.....	58,730.11
Add income from—	
Interest on securities owned.....	2,756.25
Premium and interest on Treasury bonds drawn for redemption.....	1,377.50
Difference between contract rate of interest, 3 per cent, and interest on $\frac{1}{4}$ per cent bonds, sold to prepay indebtedness due (in 1905) contractor new terminal at La Boca	12,597.05
Interest and exchange	4,506.60
Adjustment of freight accounts for coffee shipments, season 1903-4	3,539.15
	24,776.55
Total net income.....	782,449.21

Less—

Interest on funded debt—

First mortgage 4½ per cent bonds,
interest on \$2,395,000, January 1
to March 31, 1905 \$26,921.25
Interest on \$2,272,000, April 1 to
October 31, 1905 59,840.00

First mortgage sinking fund \$86,561.25
Subsidy to Republic of Panama 125,000.00
Subsidy to Republic of Colombia, ap-
plied to—
Interest on subsidy bonds 35,750.00
Redemption of subsidy bonds 151,750.00

Drawback on Colombian and Panamanian produce 187,500.00
8,306.13
Surplus for ten months \$428,200.71
354,248.50

Less—

Dividend No. 120, February 1, 1905, of 5 per cent—
Paid United States Government on 68,981 shares 344,905.00
Paid on remaining 1,019 shares 5,095.00
350,000.00

Net surplus carried to credit of profit and loss account 4,248.50

PROFIT AND LOSS ACCOUNT.

By balance to credit of profit and loss, December 31, 1904 4,797,423.44
By net surplus from income account for ten months ended October 31,
1905 4,248.50
By first mortgage 4½ per cent 20-year sinking fund gold bonds, redeemed. 140,000.00
4,941,671.94
Less—
To sundry accounts written off net 6,628.57
By balance to credit of profit and loss, October 31, 1905 4,935,043.37

EXHIBIT B.—Balance sheet, October 31, 1905.

Cost of road, real estate and equipment.....	\$12,028,497.25	Capital stock.....	\$7,000,000.00
Improvement and construction accounts.....	187,786.03	4 per cent 20-year sinking fund gold bonds (authorized issue, \$1,000,000):.....	
Floating equipment.....		Issued to date (4,000 bonds, less 981 bonds previously redeemed).....	\$3,019,000.00
Steamers Alliance, Finance, and Advance.....	\$370,169.27	Less: Drawn for redemption in 1906.....	140,000.00
Tugs and lighters, reduced value Dec 31, 1904.....	\$23,937.53		2,879,000.00
Add depreciation fund, previously deducted, now shown as a credit account.....	16,800.00		
	270,737.53	Total capital stock and mortgage liabilities.....	9,879,000.00
Total.....	640,936.80	6 per cent gold sinking fund subsidy bonds.....	715,000.00
Bo "in treasury":.....	12,797,972.15	Bonds drawn for redemption not presented for payment:	
5 per cent Panama Railroad Co. sinking fund subsidy bonds.....	125,000.00	4 per cent 20-year gold bonds.....	23,595.00
647 4 per cent 20-year gold sinking fund bonds.....	649,365.00	6 per cent subsidy bonds.....	2,000.00
On deposit with financial agents for redemption of bonds:	775,365.00		25,595.00
4 per cent 20-year gold bonds.....	21,015.36	Accrued interest on bonds:	
6 per cent sinking fund subsidy bonds.....	2,600.00	4 per cent 20-year gold bonds (272 bonds).....	8,530.00
Advance of subsidy to Republic of Colombia.....	26,015.36	6 per cent subsidy bonds.....	21,430.00
Balance of cost of replacement of boilers and special repairs to steamships Finance and Advance, original amount, \$392,386.39, having been reduced to the present balance by monthly charges to operating expenses.....	715,000.00	Funds for redemption of bonds:	
Current assets.....	232,680.39	4 per cent 20-year gold bonds.....	37,500.00
Coal in banks and with agents.....	454,613.81	6 per cent subsidy bonds.....	229,255.00
Coal and supplies on hand.....	136,443.61	Due Republic of Panama.....	
Due from connecting companies.....	130,969.50	Steamship and tug depreciating fund.....	
Due from United States Government.....		Current liabilities:	
Island Canal Commission.....	577,889.40	Islands drafts not presented.....	91,494.28
Post Office Department.....	60,903.49	Coupons not presented.....	4,950.00
Navy Department.....	179.65	Audited vouchers and pay rolls.....	384,542.89
Due from companies and individuals.....	639,922.54	Due to connecting lines.....	60,410.87
Miscellaneous accounts.....	42,419.26	Miscellaneous accounts.....	72,167.96
Unearned insurance and charter of steamers.....	80,588.13	Unpaid wages.....	4,084.24
General average disbursements.....	32,957.29	Balance to credit of profit and loss.....	567,409.74
	4,917.78		4,935,043.57
	1,840,781.92		
	16,446,942.76		

4715 6 per cent gold sinking fund subsidy bonds of \$1,000 each, amounting to \$715,000, issued Nov. 1, 1880, fall due Nov. 1, 1910. To meet this bonded indebtedness, \$25,000 annually of the Colombian Government subsidy was pledged till Mar. 27, 1908, the same to be applied by the company; first, to the payment of the interest, and second, as a cumulative sinking fund for the redemption of the principal, the bonds to be drawn yearly in September to an amount equal to the then surplus of the subsidy sinking fund, the drawn bonds to be paid on Nov. 1 after each drawing, and thereby redeeming the whole issue in 1908.

EXHIBIT C.—Statement of earnings and expenses for ten months ending October 31, 1905 and 1904.

EARNINGS.

	1905.	1904.	Increase.	Decrease.
Colon to Panama:				
Freight.....	\$849,538.50	\$645,010.77	\$204,527.73	
Passengers.....	67,855.17	43,145.96	24,709.21	
Mails.....	65,757.12	68,258.81		\$2,501.69
Extra baggage.....	12,245.97	8,587.26	3,658.71	
Treasure.....	8,888.82	7,529.56	1,359.26	
Total.....	1,004,250.56	772,532.36	231,718.22	
Panama to Colon:				
Freight.....	456,592.42	462,511.00		5,918.58
Passengers.....	61,308.02	42,325.26	18,982.76	
Mails.....	4,692.60	4,625.74	66.86	
Extra baggage.....	7,985.14	7,643.56	341.58	
Treasure.....	14,959.36	10,869.13	4,090.23	
Total.....	545,587.54	527,974.69	17,612.85	
Miscellaneous:				
Lighterage.....	69,001.14	37,535.51	31,465.63	
Water supplied shipping.....	19,701.38	13,983.23	5,718.15	
Rental of property.....	25,526.16	25,635.71		109.61
Wharfage and light dues, Colon.....	52,206.60	37,283.50	14,923.10	
Wharfage, Panama and La Boca.....	119,485.64	157,036.61		37,550.97
Cranage earnings, La Boca.....	13,279.43	19,385.32		6,105.89
Storage and freight handling.....	10,081.25	4,921.81	5,159.44	
Telegraph.....	1,238.33	4,644.35		3,406.02
Miscellaneous earnings, other sources.....	52,205.51	9,415.71	42,789.80	
Total.....	362,764.78	309,841.75	52,923.03	
Total railroad earnings.....	1,912,562.90	1,610,348.80	302,214.10	
Steamship line:				
Freight.....	790,301.10	641,051.02	149,250.08	
Passengers.....	248,914.19	198,067.89	50,846.30	
Mails.....	102,287.19	87,191.42	15,095.77	
Extra baggage.....	2,553.37	2,325.87	227.50	
Treasure.....	12,230.22	7,994.13	4,236.09	
Wines and liquors.....	5,755.21	8,480.67		2,725.46
Miscellaneous.....	5,507.10	639.30	4,867.80	
Total.....	1,165,058.38	930,750.30	234,308.08	
Grand total earnings.....	3,077,621.28	2,541,099.10	536,522.18	

EXPENSES.

Railroad operating expenses:				
General expenses, New York.....	\$41,464.51	\$49,302.23		\$7,927.72
General expenses on Isthmus.....	33,142.27	24,801.92	\$8,340.35	
Conducting transportation.....	635,600.60	349,554.38	286,046.22	
Maintenance of equipment.....	118,573.45	102,589.03	16,084.42	
Maintenance of way and structures.....	207,215.11	98,539.72	108,675.39	
Lighterage.....	79,962.23	70,249.84	9,712.39	
Docks and wharves, maintenance.....	53,108.37	70,664.47		17,556.10
Real estate expenses.....	34,167.77	28,679.10	5,488.67	
Loading and discharging vessels at La Boca.....	10,276.04	18,876.77		8,600.73
Total railroad expenses.....	1,213,610.35	813,947.46	400,262.89	
Steamship line:				
General expenses, New York.....	24,785.46	28,299.62		3,514.16
General expenses, Isthmus.....	20,204.14	14,230.73	5,973.41	
Steamer expenses.....	778,992.09	527,187.86	251,804.23	
Agency expenses.....	101,512.31	88,763.44	12,748.87	
Charter of steamers.....	180,834.27	168,750.78	12,083.49	
Total steamship expenses.....	1,106,328.27	827,232.43	279,095.84	
Grand total expenses.....	2,319,938.62	1,641,179.89	678,758.73	

REPORT OF THE ISTHMIAN CANAL COMMISSION.

427

EXHIBIT C.—Statement of earnings and expenses for ten months ending October 31, 1905 and 1904—Continued.

SUMMARY.

	1905.	1904.	Increase.	Decrease.
Railroad earnings:				
Colon to Panama	\$1,004,250.68	\$772,532.36	\$231,718.22	
Panama to Colon	545,537.54	527,974.69	17,562.85	
Miscellaneous	362,764.78	309,841.75	52,923.03	
Total railroad earnings	1,912,552.90	1,610,348.80	302,204.10	
Total railroad expenses	1,213,610.35	813,347.46	400,262.89	
Net earnings	698,942.55	797,001.34		\$98,058.79
Per cent of expenses to earnings	63.45	50.58	12.87	
Steamship line:				
Total earnings	1,165,058.38	930,750.30	234,308.08	
Total expenses	1,106,328.27	827,232.43	279,095.84	
Net earnings	58,730.11	103,517.87		44,787.76
Per cent of expenses to earnings	94.96	88.88	6.08	
Grand total earnings	3,077,611.28	2,541,099.10	536,512.18	
Grand total expenses	2,319,938.62	1,640,579.89	679,358.73	
Total net earnings	757,672.66	900,519.21		142,846.55
Per cent of expenses to earnings	75.38	64.56	10.82	

EXHIBIT D.—Statement of operating expenses of railroad for ten months ending October 31, 1905 and 1904.

	1905.	1904.
<i>General expenses, New York.</i>		
Advertising:		
Folders and posters	\$67.00	\$331.21
General	192.95	169.90
Clerks, salaries of	12,114.31	10,683.01
Directors' and committees' fees	1,807.40	5,176.46
General offices:		
Repairs and rent of	2,500.39	1,943.35
Other expenses	1,714.06	1,333.35
Incidentals	1,591.66	1,064.10
Legal services and expenses	3,541.49	3,893.30
Officers, salaries of	15,402.78	23,035.00
Stationery and printing	1,467.25	492.54
Telegrams and cables	1,065.22	1,070.01
Total	41,464.51	49,392.23
<i>General expenses, Isthmus.</i>		
Advertising	29.60	10.16
Clerks and attendants, salaries of	24,682.36	6,737.36
Cablegrams	380.73	396.30
Hospital service	4,321.32	5,569.21
Incidentals	46.50	452.14
Legal expenses	1,325.91	1,725.70
Miscellaneous	3,942.85	2,378.22
Officers, salaries of	6,156.08	5,945.58
Office expenses and supplies	1,207.13	878.22
Stationery and printing	1,046.77	706.03
Total	33,142.37	24,801.92
<i>Conducting transportation.</i>		
Advertising	1,412.00	1,135.56
Clearing wrecks	41.40	53.03
Engineers and firemen	47,362.77	26,354.14
Fuel for locomotives	50,468.72	34,902.39
Freight agent and clerks:		
Colon	23,591.50	15,469.33
Panama and La Boca	32,308.59	25,182.40
Injuries to persons	812.56	365.65
Incidentals	728.41	576.17
Labor:		
Colon station	137,393.12	51,660.35
Panama station and La Boca	118,615.22	64,068.90

EXHIBIT D.—Statement of operating expenses of railroad for ten months ending October 31, 1906 and 1904—Continued.

	1906.	1904.
<i>Conducting transportation—Continued.</i>		
Oil, tallow, and waste.....	\$2,126.71	\$1,439.70
Other supplies for locomotives.....	1,709.90	807.47
Roundhouse men.....	12,044.02	6,020.54
Superintendence and clerks.....	8,576.37	8,413.24
Switchmen, yardmen, and yard watchmen.....	66,784.46	40,182.32
Station agents and clerks.....	22,764.80	18,894.89
Station supplies and expenses.....	32,275.52	12,885.49
Stationery and printing.....	6,666.39	8,844.27
Train conductors, baggagemen, flagmen, and brakemen.....	86,094.06	17,363.11
Train supplies and expenses.....	6,654.81	8,683.79
Telegraph expenses.....	14,919.78	8,714.98
Water supply for locomotives.....	8,701.38	8,316.70
Rent of buildings, etc.....	251.65	1,147.90
Loss and damage, freight and baggage.....	8,844.89	9,602.75
Outside agencies.....	3,989.18	8,608.49
Total.....	635,600.60	349,551.38
<i>Maintenance of equipment.</i>		
Freight cars, repairs and renewals of.....	40,662.12	87,338.87
Incidentals.....	35.10	.....
Locomotives, repairs and renewals of.....	45,379.15	62,627.90
Passenger cars, repairs and renewals of.....	12,757.30	12,089.39
Superintendence and clerks.....	8,706.56	10,744.26
Stationery and printing.....	269.50	207.84
Shop expenses.....	469.13	578.02
Shop machinery and tools, repairs and renewals of.....	8,769.78	7,854.19
Works cars, repairs and renewals of.....	1,724.81	1,708.65
Total.....	118,673.45	102,589.09
<i>Maintenance of way and structures.</i>		
Bridges and culverts, repairs and renewals of.....	17,434.58	9,267.12
General offices, repairs and renewals of.....	3,273.32	1,200.83
Incidentals.....	340.91	86.68
Machinery and tools, repairs and renewals of.....	3,451.85	1,816.11
Rails, renewal of.....	87,126.94	10,377.90
Roadway and track, repairs of.....	35,182.47	23,122.85
Road crossings, signs and cattle guards, repairs and renewals of.....	18.38	46.42
Superintendence and clerks.....	12,031.81	7,423.73
Switches and frogs, renewals of.....	6,493.55	931.15
Spikes and rail fastenings, renewals of.....	12,064.12	8,946.37
Station buildings, repairs and renewals of.....	33,682.91	16,328.74
Shop buildings, water, and fuel stations, repairs and renewals of.....	12,609.76	13,486.09
Stationery and printing.....	688.01	275.61
Section houses, tool houses, etc., repairs and renewals of.....	.....	11.25
Ties, renewals of.....	8,427.70	5,303.54
Telegraph, repairs and renewals of.....	23,495.34	2,098.40
Weeds, brush, grass, etc., removal of.....	998.09	2,706.83
Total.....	207,451.11	98,539.72
<i>Lighterage expenses.</i>		
Fuel and water.....	5,742.59	4,891.99
Incidentals.....	818.40	.....
Labor on cargo:		
Panama.....	76,422.23	10,818.94
Isla de Naos.....	3,978.41	2,126.54
Lighters, repairs and renewals of.....	1,725.66	22,513.17
Other lighterage equipment, repairs and renewals of.....	3,159.10	5,802.21
Supplies.....	6,569.02	2,991.53
Superintendence and clerks.....	2,445.48	2,681.31
Subsistence, laborers, Isla de Naos.....	1,638.00	1,695.66
Tugs:		
Repairs and renewals of.....	1,079.61	3,790.80
Expenses while out of commission.....	239.19	637.70
Wages of crews.....	6,071.34	5,670.97
Depreciation of tugs.....	5,750.00	5,750.00
Total.....	79,962.23	70,249.84
<i>Docks and wharves—maintenance.</i>		
Docks and wharves, Colon, repairs and renewals of.....	11,988.81	5,314.05
Docks and wharves, Panama, repairs and renewals of.....	1,828.12	12,058.06
Harbor master and light-house keeper.....	244.84	731.45

REPORT OF THE ISTHMIAN CANAL COMMISSION.

429

EXHIBIT D.—Statement of operating expenses of railroad for ten months ending October 31, 1905, and 1904—Continued.

	1905.	1904.
<i>Docks and wharves—maintenance—Continued.</i>		
Light-house:		
Repairs and renewals of	\$70.18	
Supplies	65.02	366.64
La Boca pier, repairs and renewals of	1,666.27	7,196.88
La Boca basin, dredging of	16,710.80	23,996.11
Clapnets and dredges, repairs and renewals of	18,019.49	15,426.31
Buoys, repairs and renewals of	20.32	256.15
Rentals of dredges, clapnets, etc.	1,874.28	4,617.93
Total	53,108.37	70,664.47
<i>Real-estate expenses.</i>		
Colon buildings:		
Repairs and renewals of	19,960.83	17,919.51
Repairs of existing furniture	4,002.86	1,630.85
Legal and other expenses	9,914.36	8,868.95
Water for company's buildings	350.22	259.79
Total	34,167.77	28,679.10
<i>Loading and discharging vessels, La Boca.</i>		
Transporters, La Boca pier:		
Fuel, water, and supplies	1,057.44	1,018.86
Repairs and renewals of	1,054.77	7,953.77
Labor on pier	7,861.11	8,875.44
Other supplies and expenses		91.59
Expenses, transportation freight by lighters between ships lying at wharf and shore	502.72	937.07
Total	10,276.04	18,876.77
Grand total	1,213,610.35	813,347.46

EXHIBIT E.—Statement of operating expenses of steamship line for ten months ending October 31, 1905 and 1904.

	1905.	1904.
<i>General expenses, New York.</i>		
Advertising folders and posters	\$39.26	\$144.63
Advertising, general	122.69	94.80
Clerks, salaries of	7,361.65	6,105.18
Directors' and committees' fees	967.60	2,903.54
General offices:		
Repairs and rent of	1,541.30	1,112.15
Other expenses	1,026.01	772.80
Incidentals	984.86	619.74
Legal services and expenses	2,120.30	2,271.60
Officers, salaries of	9,106.73	13,186.99
Stationery and printing	395.14	103.16
Telegrams and cables	619.62	609.08
Total	24,785.46	28,209.62
<i>General expenses, Isthmus.</i>		
Advertising	17.40	5.78
Clerks and attendants, salaries of	9,042.96	3,871.87
Cablegrams	233.80	224.16
Hospital service	2,652.12	3,253.35
Incidentals	28.78	220.08
Legal expenses	790.29	387.81
Miscellaneous	2,383.14	1,362.96
Officers, salaries of	3,665.04	3,403.41
Office expenses and supplies	743.68	198.72
Stationery and printing	646.93	402.29
Total	20,204.14	14,230.73

EXHIBIT E.—Statement of operating expenses of steamship line for ten months ending October 31, 1905 and 1904—Continued.

	1905.	1904.
<i>Agency expenses.</i>		
Advertising, newspapers.....	\$2,790.16	\$2,801.04
Buildings, docks, and wharves:		
Repairs and rent of.....	36,828.12	33,098.21
Other expenses.....	6,678.22	6,270.56
Commissions, passengers.....	1,256.30	1,464.61
Insurance.....	1,151.00	1,164.76
Injuries to persons.....	13.00	67.85
Incidentals.....	57.85	13,980.80
Labor, general.....	16,818.55	5.00
Legal services and expenses.....	12.78	50
Loss and damage.....	30,421.21	25,878.55
Salaries of agents and clerks.....	2,480.83	2,168.89
Stationery and printing.....	128.26	75.71
Telegrams and cables.....	950.00	872.22
Taxes.....	2,423.03	3,119.23
Outside agencies.....		
Total.....	101,512.31	88,763.44
<i>Steamer expenses.</i>		
Custom-house and port charges.....	9,547.14	5,937.95
Docking.....	379.78	120.45
Equipment, deck department.....	14,825.58	6,753.07
Equipment and spare machinery, engineer's department.....	2,731.92	1,492.65
Equipment, commissary department.....	10,045.66	11,322.32
Fuel.....	123,622.56	99,920.31
Feeding passengers and crew.....	96,229.13	70,398.39
Incidentals.....	3,272.40	1,611.28
Injuries to persons.....	292.11	462.28
Labor on cargo.....	167,392.63	105,963.71
Labor on coal.....	18,058.52	12,089.91
Labor on ashes.....	957.00	994.70
Loss and damage.....	4,886.06	3,023.98
Oil and waste.....	3,308.94	2,197.01
Painting ship's bottom.....	1,376.80	458.60
Pilotage and towage.....	9,168.02	7,209.41
Quarantine.....	1,898.04	560.00
Repairs, deck department.....	20,596.83	6,893.20
Depreciation and extraordinary repairs, deck department.....	21,666.67	12,015.46
Repairs, engine department.....	26,877.23	11,477.29
Depreciation and extraordinary repairs, engine department.....	10,833.33	6,007.74
Repairs, commissary department.....	7,908.29	2,304.98
Stores:		
Deck department.....	6,741.24	4,535.13
Engine department.....	5,208.92	3,486.98
Commissary department.....	2,575.37	1,987.76
Surgeon's department.....	525.12	294.41
Stationery and printing.....	1,418.10	1,001.06
Telegrams and cables.....	964.04	800.65
Wages.....	154,123.40	118,025.10
Water.....	19,101.92	11,814.86
Washing.....	4,705.38	3,312.06
Insurance.....	27,653.97	12,466.54
Total.....	778,992.09	526,951.64
Charter of steamers.....	180,834.27	168,750.78
Grand total.....	1,106,828.27	827,232.48

EXHIBIT F.—Statement of expenditures for improvements and construction for ten months ending October 31, 1905.

New "Y" at La Boca.....	^a \$5,505.60
Duplicate ice plant.....	^a 6,134.32
Two new lighters, Panama Bay.....	^a 14,251.66
Two new steamers.....	^b 2,000.00
New electric motors on steam cranes.....	^a 3,873.31
Duplicate electric-light plant, Colon.....	^a 4,247.42
New air compressor.....	5,444.66
Wrecking crane.....	8,451.20
Pneumatic tools and machinery.....	387.22
Improvements to pier No. 4.....	^a 22,412.79
La Boca waterworks.....	3,271.30

^a Uncompleted.^b Completed plans.

Two upright boilers, Panama.....	\$3,901.95
Annex to train master's office.....	857.90
Third story, Washington House.....	818.90
Extension of sidings.....	1,043.89
New equipment.....	1,220.08
Permanent refrigerating plant at Cristobal.....	133.73
New lighters at Colon.....	44.01
New oil house, Cristobal.....	1,073.01
New Witcomb planer for shops.....	882.22
Temporary refrigerating plant at Cristobal.....	2,535.47
Living cars for laborers.....	4,674.01
Commissary tracks, Gorgona.....	901.68
Laundry at Cristobal.....	19.75
Bakery at Cristoba.....	3.93
Annex to cashier's office.....	101.70
One Fay automatic cut-off saw.....	460.00
Gravel dredge at Tabernilla.....	34.39
New tug for Colon Harbor.....	59,227.93
Total.....	153,709.18

EXHIBIT G.—Statement of steamship and tug replacement and depreciation accounts.

Steamship and tug replacement fund.

Debits:

Repairs to tug Bolivar, made in 1902.....	\$41,444.88
Repairs to steamship Alliança, made in 1903.....	5,814.17
Repairs to steamship Advance, made in 1903-4.....	203,664.31
Repairs to steamship Finance, made in 1903-4.....	188,666.08
	439,589.44

Credits (being charges to operating expenses and transfers from depreciation fund):

Tug Bolivar—

Charges to operating expenses—

Jan. 1, 1897, to June 30, 1902, at \$250 per month.....	\$16,500.00
July 1, 1902, to Sept. 30, 1905, at \$400 per month.....	15,600.00

Transferred from depreciation fund in
October, 1905.....

9,344.88
\$41,444.88

Steamer Alliança—

Charges to operating expenses—

Oct. 1, 1903, to Sept. 30, 1905, at \$250 per month.....	6,000.00
Less overcredit transferred to depreciation fund.....	185.83

5,814.17

Steamer Advance—

Transferred from depreciation fund in
July, 1904.....

51,375.00

Charges to operating expenses—

Jan. 1, 1903, to June 30, 1904, at \$500 per month.....	9,000.00
July 1, 1904, to Oct. 31, 1905, at \$1,750 per month.....	28,000.00

88,375.00

Steamer Finance—

Transferred from depreciation fund in
July, 1904.....

51,375.00

Charges to operating expenses—

July 1, 1904, to Oct. 31, 1905, at \$1,250 per month.....	20,000.00
--	-----------

71,375.00

207,009.05

* Uncompleted.

Balance to debit of account as per general balance sheet:

Steamer Advance	\$115, 289. 31
Steamer Finance	117, 291. 08
	<u>\$232, 580. 39</u>

Steamship and tug depreciation fund.

Credits:

Depreciation on—

Steamers Alliança, Advance, and Finance—

Charges to operating expenses from Jan. 1, 1897,
to June 30, 1899, at \$3,425 per month

102, 750. 00

Tug Bolivar—

Charges to operating expenses from Jan. 1, 1897,
to Sept. 30, 1905, at \$175 per month

18, 375. 00

For Oct., 1905

575. 00

18, 950. 00

Steamer Alliança—

Transferred from "replacement fund," being
charges to operating expenses in excess of re-
pairs

185. 83

Charged to operating expenses in Oct., 1905

250. 00

435. 83

122, 135. 83

Debits:

Transferring to "replacement fund," in July, 1904, ac-
count repairs steamships Advance and Finance, accu-
mulated charges to operating expenses for depreciation
on fleet

102, 750. 00

Transferring to "replacement fund," in Oct., 1905,
amount required to write off balance of cost of repairs
of tug Bolivar

9, 344. 88

112, 094. 83

Balance to credit of "depreciation fund," as per gen-
eral balance sheet

10, 040. 95

EXHIBIT H.—Statement of classified railroad earnings, tonnage, and passengers, Colon to
Panama, for ten months ending October 31, 1905.

FREIGHT.

	Tonnage.			Earnings.			Rate per ton.	
	1905.	1904.	Increase.	1905.	1904.	Increase.	1905.	1904
Through:								
From New York	84, 994	76, 319	8, 375	\$312, 087. 61	\$271, 394. 03	\$40, 993. 58	\$3. 67	\$3. 54
From New Orleans	4, 162	1, 026	3, 136	13, 367. 65	4, 740. 69	11, 526. 96	3. 93	4. 62
From Europe	79, 125	67, 271	11, 854	311, 734. 21	253, 959. 60	57, 774. 61	3. 94	3. 78
Total	168, 281	144, 616	23, 365	640, 189. 47	529, 794. 32	110, 395. 15	3. 80	3. 66
Local:								
Commercial	32, 745	21, 066	11, 678	130, 865. 71	86, 830. 88	44, 034. 83	4. 00	4. 12
Isthmian Canal	56, 913	8, 661	48, 252	78, 498. 32	28, 385. 62	50, 112. 70	1. 38	3. 28
Company freight	29, 638	13, 295	16, 343					
Total	119, 296	43, 022	76, 273	209, 364. 03	115, 216. 45	94, 147. 58		
Total freight	287, 577	187, 938	99, 638	849, 553. 50	645, 010. 77	204, 542. 73		

EXHIBIT H.—Statement of classified railroad earnings, tonnage, etc.—Continued.

MAILS.

	Weight.				Earnings.			
	1905.	1904.	Increase.	Decrease.	1905.	1904.	Increase.	Decrease.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>				
From New York ..	795,000	788,652	6,348		\$53,598.99	\$51,474.06	\$2,124.94	
From Europe	110,379	157,654		47,275	9,042.14	13,067.44		\$4,015.30
Local	149,629	192,170		42,541	3,115.99	3,727.32		611.33
Total.....	1,055,008	1,138,476		83,468	65,757.12	68,258.81		2,501.69

TREASURE.

	Value.				Earnings.			
	1905.	1904.	Increase.	Decrease.	1905.	1904.	Increase.	Decrease.
From New York ..	\$1,504,458	\$446,836	\$1,057,622		\$2,781.82	\$1,451.99	\$1,329.83	
From Europe	1,468,162	1,819,961		\$351,799	5,443.89	6,016.43		\$572.54
Local:								
Commercial ..	322,676	39,950	282,726		583.66	59.92	523.74	
Isthmian Canal	116,800	2,443	114,357		29.45	1.22	28.23	
Total.....	3,412,096	2,309,190	1,102,906		8,838.82	7,529.56	1,309.26	

BAGGAGE.

	Weight.				Earnings.			
	1905.	1904.	Increase.	Decrease.	1905.	1904.	Increase.	Decrease.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>				
From New York ..	104,263	66,481	37,782		\$1,681.12	\$1,236.81	\$444.31	
From Europe	38,743	35,144	3,599		889.85	1,064.82		\$164.47
Local	657,499	253,939	403,560		9,675.00	6,296.13	3,378.87	
Total.....	800,505	355,564	444,941		12,245.97	8,587.26	3,658.71	

PASSENGERS.

	Number.				Earnings.			
	1905.	1904.	Increase.	Decrease.	1905.	1904.	Increase.	Decrease.
From New York:								
First class.....	2,217	885	1,332		\$7,813.98	\$8,078.71		\$264.73
Second class ..	405	463		68	1,759.11	2,202.40		443.29
From Europe:								
First class.....	498	386	112		3,331.03	3,551.08		220.00
Second class ..	320	237	83		1,402.71	1,088.50	\$314.21	
Local:								
First class.....	29,600	3,925	25,675		18,932.46	10,050.66	8,881.80	
Second class ..	101,712	36,226	65,486		34,615.88	18,174.66	16,441.22	
Total.....	134,752	42,122	92,630		67,855.17	43,145.96	24,709.21	

EXHIBIT I.—Statement of railroad freight statistics for four months ending October 31, 1905.

Gross earnings	\$466,929.90
Expenses	\$358,504.14
Net earnings	\$108,425.76
Percentage of expenses to earnings	76.78
Freight train mileage (including all mixed train mileage)	56,619
Freight trains per day per mile of road	9.19
Loaded car mileage	654,749
Empty car mileage (including cabooses)	255,614

Percentage of loaded car mileage to total freight car mileage (including caboose).....	71.92
Loaded freight cars in each freight train.....	11.56
Empty freight cars in each freight train (including caboose).....	4.51
Loaded and empty freight cars in each freight train (including caboose).....	16.07
Tons commercial freight.....	156,034
Tons commercial freight 1 mile.....	6,605,046
Tons company freight.....	8,892
Tons company freight 1 mile.....	284,041
Tons all freight.....	164,926
Tons all freight 1 mile.....	6,889,087
Tons in each loaded car (including company freight).....	10.52
Tons in each car, loaded and empty (including company freight).....	7.57
Tons in each train.....	121.67
Earnings per freight car per mile.....cents.....	51.29
Expenses per freight car per mile.....do.....	39.39
Net earnings per freight car per mile.....do.....	11.90
Average distance freight carried.....miles.....	42.33
Earnings for freight train mile.....	\$8.25
Expenses per freight train mile.....	\$6.33
Net earnings per freight train mile.....	\$1.92
Earnings per ton.....	\$2.99
Earnings per ton per mile.....cents.....	7.07
Expenses per ton per mile.....do.....	5.43
Net earnings per ton per mile.....do.....	1.64
Tons carried 1 mile per mile of road.....	131,812
Earnings per mile of road.....	\$9,318.10
Estimated loaded cars in each train.....	14.43
Revenue freight engine mileage.....	66,353
Estimated loaded cars hauled per revenue freight engine.....	12.31
Tons hauled per revenue freight engine.....	103.82

NOTE.—On account of the congested condition of traffic on the Isthmus during this period, results showing cost of operation are abnormal.

EXHIBIT J.—Statement of railroad passenger statistics for four months ending October 31, 1905.

Gross earnings (including mail, extra baggage, and treasure).....	\$99,775.94
Expenses.....	\$139,333.56
Net earnings.....	\$39,557.62
Percentage of expenses to earnings.....	139.65
Passenger-train mileage (including all mixed-train mileage).....	53,086
Passenger trains per day per mile of road.....	8.61
Coach mileage.....	163,494
Baggage, express, and mail mileage.....	60,697
Total passenger car mileage.....	224,191
Passengers carried.....	123,870
Passengers carried 1 mile.....	1,620,378
Average distance each passenger carried.....	13.08
Passengers in each passenger train.....	30.52
Passengers in each passenger car, excluding baggage, mail, and express.....	9.91
Earnings per passenger-train mile.....	\$1.88
Expenses per passenger-train mile.....	\$2.62
Net earnings per passenger-train mile.....	\$0.74
Earnings per passenger-car mile (including mail and express).....cents.....	44.5
Expenses per passenger-car mile.....do.....	62.1
Net earnings per passenger-car mile.....do.....	\$17.6
Cars in each passenger train, including baggage, mail, and express.....	4.22
Earnings per passenger.....cents.....	42.16
Earnings per passenger per mile.....do.....	3.22
Passengers 1 mile per mile of road.....	32,336
Earnings per mile of road.....	\$1,991.14

NOTE.—On account of the congested condition of traffic on the Isthmus during this period, results showing cost of operation are abnormal.

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EXHIBIT K.—Statement of railroad general statistics for four months ending October 31, 1905.

Average mile operated.....	50.11
Total freight and passenger earnings.....	\$566,705.84
Total freight and passenger expenses.....	\$407,838.10
Net freight and passenger earnings.....	\$68,867.74
Percentage of freight and passenger expenses to freight and passenger earnings.....	87.85
Total revenue train mileage.....	99,625
Gross earnings per revenue train mile.....	\$5.69
Operating expenses per revenue train mile.....	\$5.00
Net earnings per revenue train mile.....	\$0.69
Total gross earnings.....	\$720,210.54
Total gross expenses.....	\$574,819.73
Net earnings, all sources.....	\$145,390.81
Percentage of gross expenses to gross earnings.....	79.81
Earnings per mile of road.....	\$14,372.59
Expenses per mile of road.....	\$11,471.16
Net earnings per mile of road.....	\$2,901.43

EXHIBIT L.—Statement of railroad freight tonnage handled.

FIRST—FROM ALL POINTS TO ALL POINTS.

	1905.	1904.	Increase.	Decrease.
COLON TO PANAMA.				
From New York to San Francisco.....	27,560	33,074	<i>Per cent.</i>	<i>Per cent.</i>
From New York and New Orleans to Panama, South Pacific, Central America, and Mexico.....	61,596	44,571	38.20	16.67
From Europe to Panama, South Pacific, Central America, Mexico, and San Francisco.....	79,125	67,271	17.62	
From Colon to Panama (local):				
Commercial freight.....	32,745	21,066	55.44	
Isthmian Canal Commission.....	56,913	8,661	557.12	
Company's freight.....	29,638	13,295	122.93	
Total.....	287,577	187,938	53.02	
PANAMA TO COLON.				
From San Francisco to New York.....	23,028	24,093		4.42
From South Pacific, Central America, Mexico, and Panama to New York.....	42,383	36,382	16.49	
From South Pacific, Central America, Mexico, San Francisco, and Panama to Europe.....	59,917	76,019		21.18
From Panama to Colon (local):				
Commercial freight.....	9,717	9,065	7.19	
Isthmian Canal Commission.....	13,856	826	1,577.48	
Company's freight.....	7,752	5,111	50.79	
Total.....	156,653	151,526	3.38	
Total westbound and eastbound.....	444,230	339,464	30.86	

SECOND—COUNTRIES OF ORIGIN AND DESTINATION.

COLON TO PANAMA.				
For Panama.....	144,218	57,016	152.94	
For Central America.....	51,957	39,871	30.31	
For South Pacific.....	59,819	51,956	14.17	
For San Francisco.....	28,837	35,701		19.23
For Mexico.....	3,246	3,394		4.36
Total.....	287,577	187,938	53.02	
PANAMA TO COLON.				
From Panama.....	43,009	32,220	33.49	
From Central America.....	46,540	48,573		4.19
From South Pacific.....	42,330	44,537		4.96
From San Francisco.....	23,986	25,037		4.20
From Mexico.....	788	1,159		32.01
Total.....	156,653	151,526	3.38	
Total westbound and eastbound.....	444,230	339,464	30.86	

436 * REPORT OF THE ISTHMIAN CANAL COMMISSION.

EXHIBIT M.—Statement of steamship statistics for ten months ending October 31, 1905.

FREIGHT TONNAGE.

	1905.		1904.		Increase.		Decrease.	
	Ships.	Tonnage.	Ships.	Tonnage.	Ships.	Tonnage.	Ships.	Tonnage.
Panama Railroad ships:								
Arrived	30	37,664	18	25,692	12	11,972		
Sailed	31	54,886	21	41,000	10	13,886		
Chartered passenger ships:								
Arrived	25	38,519	26	35,749		2,770	1	
Sailed	24	55,331	24	46,995		8,336		
Chartered freight ships,								
sailed	3	12,779			3	12,779		
Total	113	199,179	89	149,436	24	49,743		

1905:
 Total freight earnings \$790,301.10
 Average rate per ton 4.02

PASSENGERS CARRIED.

	1905.		1904.		Increase.		Decrease.	
	Ships.	Passen- gers.	Ships.	Passen- gers.	Ships.	Passen- gers.	Ships.	Passen- gers.
Panama Railroad ships:								
Arrived	30	1,354	17	950	13	804		
Sailed	31	2,077	20	1,081	11	996		
Chartered passenger ships:								
Arrived	25	1,880	26	1,585		295	1	
Sailed	24	1,753	24	1,014		779		
Total	110	7,504	87	4,630	23	2,874		

1905:
 Total passenger earnings \$251,467.56
 Average rate per passenger 33.51

EXHIBIT N.—Statement of locomotive and car equipment.

	Stock on—		Increase during 10 months.	Decrease during 10 months.
	Oct. 31, 1905.	Dec. 31, 1904.		
Locomotives:				
Road engines	24	24		
Switch engines	1	11		
Passenger cars:				
Special	5	5		
First-class	8	8		
Composite (first and second class)	1	2		1
Second-class	10	9		1
Baggage	7	7		
Freight cars:				
Box	584	584		
Coal	172	173		1
Flat	148	151		3
Miscellaneous:				
Local express	20	22		2
Wrecking	1	1		
Caboose	7	5		2
Specie	2	2		
Water	8	9		1
Stock	9	9		
Road department	37	11		26
Steam pile driver	1	1		
Steam wrecker	1			1

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EXHIBIT O.—Statement of floating equipment.

Name.	Gross tonnage.	Length.	Breadth.	Depth.	Hull.	Passenger accommodation.	
						Cabin.	Steerage.
		<i>Feet.</i>	<i>Ft. in.</i>	<i>Ft. in.</i>			
Steamship Alliança	2,985	303	42 3	23 9	Iron	82	66
Steamship Advance	2,605	295	38 4	23 4	do	64	66
Steamship Finance	2,603	300	38 4	23 6	do	64	62
Tug Ancon	105	98	18 0	6 0	do		
Tug Bolívar	224	127	23 0	9 6	do		
Tug Cristobal	161	102	25 3	12 5	Copper sheathed		
Six freight lighters ^b	340	110	24 2	7 2	Steel		
Six freight lighters ^c	230-300	110	24 0	6 6	Iron		
Three coal lighters	222	110	24 0	8 0	do		
One floating pile driver		60	30 0	5 0	Wood		

^aCondemned.^bTwo new lighters added.^cTwo lighters dismantled.

CONTRACT BETWEEN PANAMA RAILROAD COMPANY AND J. E. MARKEL CONCERNING OPERATION OF HOTELS.

This agreement, entered into this seventh day of September, A. D. 1905, between the Panama Railroad Company, a corporation organized and existing under and by virtue of the laws of the State of New York, hereinafter referred to as the Railroad Company, and Jacob E. Markel, of Omaha, Nebraska, hereinafter referred to as the Contractor, witnesseth that:

Whereas the Railroad Company will have a large number of men in its employ at various places along said line, and the Isthmian Canal Commission will have a large number of employees at work along said line or contiguous thereto;

And whereas such men employed on such work require board and lodging while so employed;

And whereas it is thought that the comfort and convenience of such employees will be insured by providing facilities at the several points where such work is being prosecuted for boarding and lodging, and furnishing of supplies to such men as shall seem fit to avail themselves of the facilities hereinafter provided for.

Now, therefore, for and in consideration of the covenants and agreements hereinafter set forth to be by the respective parties hereafter kept, done, and performed, it is agreed as follows, to wit:

The Railroad Company shall furnish the Contractor all necessary hotel and camp buildings at such points as it may designate, and shall maintain same. It shall equip and deliver to the Contractor, and the Contractor shall maintain during the continuance of this agreement, all necessary furniture, bedding, tableware, tinware, cutlery, ranges, refrigerators, cooking utensils, and other equipment ordinarily needed in the operation of such hotels and camps.

The Railroad Company shall charge the Contractor the following rates per hundred pounds for transportation of supplies from New York to Colon; which rates shall cover delivery of the supplies in the refrigerating plant or storeroom to be provided at that point:

For articles requiring refrigeration, 57½ cents.

For articles not requiring refrigeration, 22½ cents.

On articles requiring freezing and storage in refrigerating plant at Colon it shall charge the Contractor 40 cents per hundred pounds, which charge shall cover the cost of freezing and of storage in the refrigerating plant at Colon, regardless of the length of time such articles remain in storage, not to exceed thirty days.

The Railroad Company shall furnish, maintain, and operate such refrigerating plant, and shall assign to the Contractor such room or rooms therein as may be necessary from time to time for the storage of his supplies requiring refrigeration. The Contractor shall have the right to employ his own men at such refrigerating plant for the purpose of preparing his supplies for shipment to the hotels and camps operated by him under this agreement, and shall hold the Railroad Company harmless of all acts of his agents or employees which shall be or may become harmful or detrimental to the operation of the remainder of said plant by said Railroad Company. The Contractor shall also hold the Railroad Company harmless on account of all acts of his agents and employees resulting in damage to the supplies or other property of the Contractor.

For all articles not requiring freezing or storage in refrigerating plant at Colon the Railroad Company shall furnish the Contractor storage room, and shall also furnish

the Contractor room to be occupied by himself and force for general office purposes, and shall charge the Contractor as rent for such storage and office room five per cent per annum upon the cost of such portion of the building as is so occupied, such estimate and allotment to be made by the general manager of the Railroad Company. The Contractor shall also pay the Railroad Company such reasonable amount per annum to cover depreciation of such portion of the building as is so occupied by him, as shall be fixed by the general manager of the Railroad Company.

The Railroad Company shall be responsible to the Contractor for his supplies while in such refrigerating plant and storage room, and for the proper refrigeration of such supplies as require refrigeration. If, in case of loss or damage to the supplies of the Contractor, or other supplies, while in such refrigerating plant or storage room, the responsibility for such loss or damage can not be definitely fixed, the amount of such loss or damage shall be divided equally between the Railroad Company and the Contractor.

The Railroad Company shall furnish and haul on such trains as may be designated by the general manager of the Railroad Company such refrigerator and other cars as may be required by the Contractor for the distribution of his supplies from the refrigerating plant and storage room at Colon to the stations nearest the hotels and camps operated by him under this agreement, and for transporting to Colon or other points any supplies which the Contractor may need to send to such points from such hotels and camps or from other stations on the railroad. It shall charge the Contractor for such service in either or both directions an amount per day per car used which shall be fixed by the general manager of the Railroad Company. The Contractor shall furnish his own employees for handling such supplies on such cars and to and from such cars. At points where the Railroad Company shall have facilities for handling supplies from the railroad to the hotels and camps the Railroad Company shall allow the use of such facilities to the Contractor.

The Railroad Company shall furnish and maintain buildings at Colon for use as laundry and bakery, and shall equip same with necessary laundry and bakery machinery and tools. Such equipment shall be maintained by the Contractor during the continuance of this agreement. The Railroad Company shall charge the Contractor as rent for such laundry and bakery buildings 5 per cent per annum upon the cost of such buildings, such cost to be determined by the general manager of the Railroad Company, and the Contractor shall also pay the Railroad Company such reasonable amount per annum to cover depreciation of such buildings as shall be fixed by the general manager of the Railroad Company.

The Railroad Company shall furnish the Contractor necessary supply of water at such hotels, camp buildings, and storerooms without charge.

The Railroad Company shall furnish the Contractor f. o. b. cars on track at stations at such hotels, camp buildings, and storerooms a good grade of bituminous coal at six dollars (\$6) per net ton.

Electric light shall be furnished the Contractor at cost by the Railroad Company for use in such hotels, camps, storehouses, etc., at points where electric light plants are operated by the Railroad Company or the Isthmian Canal Commission.

The Railroad Company shall furnish the Contractor at cost such ice as may be required by him for actual use at the hotels, camps, and storehouses operated by him under this agreement.

The Railroad Company shall furnish the Contractor transportation on its steamship line New York to Colon and on its railroad from Colon to their destination for his employees at the same rate as it charges the employees of the Isthmian Canal Commission for like service, and shall grant his employees the same rate for return trip to New York as is granted to the employees of such Commission.

The Railroad Company shall deduct from the wages of its employees and pay to the Contractor such amounts as may be due him by such employees for care of room, board, or supplies furnished them by him, and shall arrange to have the Isthmian Canal Commission deduct from the wages of its employees and pay to him such amounts as may be due him by them for room, board, or supplies furnished them by him.

The Railroad Company shall grant to the Contractor and his employees the same hospital privileges enjoyed by its own employees.

The Railroad Company shall grant to the Contractor the free use of its telegraph and telephone lines for the transmission of such messages as are necessary in connection with the operation of the hotels and camps covered by this agreement.

The Railroad Company shall furnish the Contractor without charge a suitable house for occupancy by himself and family.

The Contractor shall furnish the Railroad Company a corporate bond satisfactory to the president of the Railroad Company in the sum of one hundred thousand dol-

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lars (\$100,000) to insure the faithful performance of his obligations under this agreement.

The Contractor shall at all times keep the hotels, camp buildings, and storerooms covered by this agreement, and the premises surrounding same, as well as the furniture, bedding, tableware, tinware, cutlery, ranges, refrigerators, cooking utensils, and other equipment used in and about such buildings in a cleanly and sanitary condition, and shall at all times keep the hotels, camp, and storerooms covered by this agreement open to the inspection of the general manager of the Railroad Company, or such representative as he may designate, and shall at all times operate the hotels and camps covered by this agreement to the satisfaction of the general manager of the Railroad Company.

The Contractor shall not employ in or about such hotels, camps, or storerooms any person who is or may be objectionable to the Railroad Company, and shall, upon the request of the Railroad Company, discharge such objectionable employee or employees.

The Contractor shall furnish such employees of the Railroad Company and the Isthmian Canal Commission as are paid by the Railroad Company and the Isthmian Canal Commission in gold, and their families, meals, maintenance and care of rooms, at the following rates:

Maintenance and care of rooms per month per person over 12 years of age.....gold..	\$6.00
Maintenance and care of rooms per month per person over 5 years and under 12 years of age.....	No charge.
Maintenance and care of rooms per day per person over 12 years of age.....gold..	\$0.20
Maintenance and care of rooms per day per person over 5 and under 12 years of age.....	No charge.
Meals per month per person over 12 years of age.....gold..	\$30.00
Meals per month per person over 5 and under 12 years of age.....do....	10.00
Meals per day per person over 12 years of age.....do....	1.00
Meals per day per person over 5 and under 12 years of age.....do....	.40
Meals per meal per person over 12 years of age.....do....	.33 $\frac{1}{3}$
Meals per meal per person over 5 and under 12 years of age.....do....	.13

In case any employee or person covered by above classifications, who shall have board and lodging, or either, at a monthly rate, shall be necessarily absent for a period not less than seven (7) consecutive days in any one month, such person shall be furnished board and lodging, or either, at the monthly, and not the per diem, rate, for the balance of such month.

Any employee, or other person, in above classification, will be furnished an identification card, on request to the Contractor, which will enable the holder to obtain board and lodging, or single meals, at the monthly or daily rate he has contracted for, at any hotel or camp operated by the Contractor.

The meals furnished such gold employees and their families shall consist of the following articles and shall be of sufficient amount to satisfy their appetites:

Breakfast.—Fruit, cereal, fruit, meat or eggs, one vegetable, bread and butter, coffee or tea.

Dinner.—Soup, fish, fresh meat, entrée, two vegetables, bread and butter, pie or pudding, coffee or tea.

Supper.—Cereal, fish, meat or eggs, fruit sauce or preserves, bread and butter, cake, coffee or tea.

The Contractor shall furnish such employees of the Railroad Company and the Isthmian Canal Commission as are paid by the railroad company and the Isthmian Canal Commission in silver and their families meals at the following prices:

	Gold.
Meals per month per person over 12 years of age.....	\$12.00
Meals per month for person over 5 and under 12 years of age.....	5.00
Meals per day per person over 12 years of age.....	.45
Meals per day per person over 5 and under 12 years of age.....	.20
Meals per meal per person over 12 years of age.....	.15
Meals per meal per person over 5 and under 12 years of age.....	.10

In case any employee or person covered by above classification, who shall have board and lodging, or either, at a monthly rate, shall be necessarily absent for a period not less than seven (7) consecutive days in any one month, such person shall be furnished board and lodging, or either, at the monthly, and not the per diem, rate for the balance of each month.

The meals furnished such silver employees, and their families, shall consist of the following and shall be of sufficient amount to satisfy their appetite:

Breakfast.—Cereal, fish, bread and butter, coffee or tea.

Dinner.—Soup, meat or fish, two vegetables, bread and butter, pie or pudding, coffee or tea.

Supper.—One meat, consisting of beef, mutton, or pork; one vegetable, consisting of beans, yams, or yucca; bread and butter, sauce or syrup, coffee or tea.

It is the understanding that the menus outlined above for both gold and silver employees are simply examples of the meals that will be required and that such frequent changes in the menus will be made as will give such employees proper variety of food.

The Contractor shall furnish at his own expense all of the provisions and supplies in such hotels and camps, and shall also furnish at his own expense all of the cooks, waiters, chambermaids, and other employees required by him in connection with the operation of the hotels and camps covered by this agreement.

The Contractor shall be permitted to sell at the hotels operated by him under this agreement, at such prices as may be considered reasonable by the general manager of the Railroad Company, newspapers, periodicals, books, and such other articles as are usually sold at news stands in hotels, as well as soft drinks, light wines, beer, cigars, cigarettes, and tobacco.

The Contractor shall be permitted and required to keep on hand at the camps operated by him under this agreement, for sale to employees of the Railroad Company and the Isthmian Canal Commission, supplies and provisions, cooked or uncooked, to be sold to such employees at such prices as may be considered reasonable by the general manager of the Railroad Company.

The Contractor shall be permitted to do laundry work in the laundry building provided for in this agreement for employees of the Railroad Company and Isthmian Canal Commission and their families, and shall make such reasonable charges as shall be satisfactory to the general manager of the Railroad Company.

In consideration of free transportation of the Contractor and his employees where the same shall be furnished, the Contractor shall hold harmless the Railroad Company from and against all claims, demands, suits, judgments, costs, or payments of money of any nature or kind whatever arising out of personal injuries to or death of said Contractor or his employees, while being transported over the steamship and railroad lines of said Railroad Company, under the terms of this agreement.

The Contractor shall use every precaution to prevent damage by fire to the buildings and other property of the Railroad Company.

In the event that the Contractor shall not perform his obligations under this agreement to the satisfaction of the general manager of the Railroad Company, the Railroad Company shall have the right to cancel this agreement at any time upon giving thirty days' notice to the Contractor of such desire upon its part.

If the Railroad Company elects to cancel this agreement at any time for the reason stated, the Railroad Company shall purchase from the Contractor such supplies and provisions as he may have on hand at the storerooms, hotels or camps, or in transit, at cost price.

Upon the termination of this agreement the Contractor shall turn over to the Railroad Company the buildings, furniture, bedding, tableware, tinware, cutlery, ranges, refrigerators, cooking utensils, and all other equipment furnished him under this agreement by the Railroad Company, in the same condition as when received by him from the Railroad Company, reasonable or ordinary wear and tear excepted.

This agreement shall take effect on the 7th day of September, A. D. 1905, and shall continue for the term of five years from such date.

The Contractor shall not have the right to transfer this agreement or sublet any buildings or premises covered by it to any other individual, firm, or corporation, without the written consent of the president of the Railroad Company.

This contract vests in the Contractor exclusive rights in the matters herein provided for during the continuance of this agreement.

Witness the signatures and seals of the parties hereto, thereto duly authorized, to this and a duplicate instrument of like tenor and effect the day and year first above written.

PANAMA RAILROAD COMPANY,
By T. P. SHONTS, [SEAL.]
As President.
JACOB E. MARKEL.
Contractor.

Attest.
T. H. ROSSBOTTOM,
1st Assistant Secretary.

Witnesses:
C. W. ELMER,
D. W. ROSS.

59TH CONGRESS, }
1st Session.

SENATE.

} Doc. No. 127,
Part 2.

ISTHMIAN CANAL.

MESSAGE

FROM THE

PRESIDENT OF THE UNITED STATES,

TRANSMITTING

CERTAIN PAPERS TO ACCOMPANY
HIS MESSAGE OF JANUARY 8, 1906.

JANUARY 11, 1906.—Read; referred to the Committee on Inter-oceanic Canals,
and ordered to be printed.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1906.

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To the Senate and House of Representatives:

I transmit herewith for your consideration certain papers which should have accompanied my message of January 8, 1906, but which were omitted on account of delay in printing.

THE WHITE HOUSE,
January 10, 1906.

THEODORE ROOSEVELT.

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**LETTER FROM THE SECRETARY OF WAR TO THE PRESIDENT
CONCERNING THE CHARGES AGAINST THE ISTHMIAN CANAL
COMMISSION CONTAINED IN AN ARTICLE IN THE "INDEPEND-
ENT," A WEEKLY PUBLICATION.**

THE WHITE HOUSE,
Washington, January 6, 1906.

SIR: My attention has been directed to an article purporting to be written by Mr. Poultney Bigelow, in a weekly publication of general circulation, attacking the administration of affairs by the Canal Commission and yourself on the Isthmus. Will you please advise me what basis if any there is for these charges?

Very truly yours,

THEODORE ROOSEVELT.

Hon. WM. H. TAFT,
Secretary of War.

WAR DEPARTMENT,
Washington, January 8, 1906.

THE PRESIDENT:

SIR: I have read the article to which you refer in your letter of the 6th instant.

The charges against the Canal Commission and those responsible for its action may be divided into classes, as follows:

The first is that relating to Colon, alleging that the conditions in that city are so unsanitary as to indicate great neglect in providing for the health of the employees of the Commission, in that the site of the city has not been properly drained, that sanitary regulations are not enforced, that the Government is wholly indifferent to the matter of food supply to the inhabitants, that there is no water supply in Colon, although officially promised by the Secretary of War for December 1, that rents in Colon are exorbitant, and that while all this neglect exists, ridiculous provisions, indicating midsummer madness on the part of the officials, are made for the benefit of the laborers, such as stretching an awning a quarter of a mile over a gutter to protect the laborers from the tropical sun.

The second class of charges relates to the mistreatment of negro laborers. It is said that the negroes have been attracted from the West Indies to labor in Panama by a statement that they would receive \$1.50 gold per day, whereas on their arrival they are not given but 75 cents per day; that there is a strong preference for whites, and that where there are efficient negro foremen they are discharged and negligent white foremen substituted; that justice is not done to the negro in any legal controversy with whites, and that the judges are incompetent because two of them do not understand the Spanish language and yet administer Spanish law among a Spanish-speaking people; that the canal management has contemptuous estimate of the efficiency of tropical negro labor, although it is good labor and the best

labor available; that a shipload of negro laborers from Martinique were cruelly mistreated by the authorities of the Zone when landed at Colon, and that, due to the mistreatment of the negroes generally, the laborers are returning to Jamaica and other islands in disgust.

A third class of charges is that the persons appointed to the Isthmus are incompetent and have been appointed through Senatorial and Congressional and other political influence, and that though found incompetent they are not disturbed, because of this influence which keeps them in their places.

A fourth class of charges is as to official incompetency or misconduct. It is said that there is so much "red tape" necessary to bring about the construction of buildings that great misery has come to the laborers who had been brought to the Isthmus and who needed and were waiting for shelter; that a large hotel for the employees of the Commission was erected at Corozal, 3 miles from Panama, in a swamp or "hog wallow," and that because of this it is wholly unoccupied; that dredges used in Culebra cut are not working to more than 20 per cent of their full capacity and that one of them once capsized; that a dredge placed for the purpose of dredging a canal from the fresh-water swamp to the sea, back of Colon, was wrongly placed, was sinking out of sight, and was the result of amateur engineering; that the sewer system in Panama was a most outrageous piece of faulty engineering; that it does not carry off the filth of the city; that the water backs up into the city, and that in fact no sewer system ought to have been constructed in Panama at all; that the quarantine officials do their best to interfere with commercial business by absurd strictness in the enforcement of quarantine regulations; that health officials take advantage of poor negroes in Colon by ordering them to throw in the streets their rain water, which they had diligently accumulated; that the twelve members of the advisory board who visited the Isthmus did not thoroughly inspect the proposed situs of the canal and its appurtenant works, but spent their time in social enjoyment or resting and in giving evidence of their quaking fear of yellow fever; that the chief of the medical bureau directed medical instruments to be purchased in America instead of Germany, although advised by a Panama official that he could buy such instruments at a less price in Germany; that the Commission brought to the Isthmus a cargo of black women for immoral purposes; and, finally, that the Secretary of War, when on the Isthmus for five days in November last, did not accept Mr. Tracy Robinson's invitation to visit the purlieus of Colon under Mr. Robinson's guidance, and further that he declined an interview with Mr. John Lundie, the engineer of the Electric Light and Refrigerator Company, of Panama.

With your permission and at the risk of some prolixity, I propose to investigate, first, the averments of fact made in this article and bring to bear such direct evidence as we can summon at this time in regard to them; second, to consider the opportunities for observation of the writer of the article; third, to consider the fair-mindedness and freedom from prejudice and the credibility of the witnesses upon whose statements he relies in making his charges, and, finally, to gather from the premises the credence that ought to be attached to what the writer says.

By great good fortune Mr. John F. Stevens, the chief engineer of the Canal Commission, is now in Washington for the purpose of aiding the Commission in its work of preparing recommendations for the

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type of the canal. He is personally cognizant of the facts with respect to every local condition described by the writer of the article. Of course he can have no knowledge with respect to conversations which the writer details with negroes and others, whose names he does not give, in respect to some particular incident occurring on the Isthmus from which the writer makes broad generalizations, but he is able to testify, by reason of having been on the Isthmus since July last, and having supervised carefully the operations under him in every respect, as to the correctness of the generalizations which the writer delights to make and of his descriptions of existing local conditions. Mr. Stevens's statement accompanies this letter.

Coming now to the conditions at Colon, Mr. Stevens says, and everyone knows who has been on the ground, that the problem of draining Colon is one of extreme difficulty, owing to the fact that it is situated on an island surrounded by the sea on one side and by a fresh-water swamp on the other; that the land is so low that the average is not more than $1\frac{1}{2}$ feet above sea level. The disposition of the tropical natives to ignore all hygienic consideration and to huddle together in settlements has extended the houses and huts into those parts of Colon that are low and at times partly submerged, and it is this which has attracted the attention, the camera, and the denunciation of the writer. All admit that the best method of treating Colon of course would be to fill in the swamp, but the swamp is so extended as to make this impossible of completion until the work of excavation at Culebra and along the way is far under way. It is doubtful whether the mouth of the canal will be where De Lesseps established it. If it is moved, as it is now proposed by some of the plans to move it, a mile or more in a westerly direction to the mouth of the Mindi River, there will be no necessity for a city at Colon. Colon is a much healthier city than Panama in spite of the unpleasant appearance of the swamp water in some of the outlying streets and at the doors of the houses on these streets. Uncertainty as to the plans of improving Colon has rendered impracticable any radical destruction of unsanitary buildings, most of which are on lands owned by the railroad company and leased on short terms to middlemen. Meantime the sanitary conditions in Panama required much more urgent treatment than those at Colon. The death rate at Panama since our taking charge of the health of the Isthmus is from 25 per cent to $33\frac{1}{2}$ per cent greater than in Colon. The Commission thought itself fully justified, therefore, in establishing a water system and sewer system in Panama first.

The improvement of the drainage of Colon was, as I have said, by no means easy. Many plans were suggested, but had to be rejected for one reason or another when seriously considered. Nearly all involved the filling of the swamp, which was, as has been explained, impracticable as a speedy remedy. Finally Mr. Stevens last summer appointed a board of resident engineers to determine the question. After two months the board reported a plan which Mr. Stevens found practicable and which the Canal Commission has approved. The work is now under way. It involves, as I am informed, the filling in of all of the streets and paving them according to the Telford method, with a crown permitting proper drainage, the cutting of a canal or ditch through the town to permit the passage of clean sea water to carry away the swamp and surface water by the rise and fall of the tide, and finally the sewerage of the city for house drainage into a cesspool,

from which the contents will be pumped far out into the sea. The improvement will cost upward of \$300,000. The dredge has been built and placed in a proper place. The streets are now being filled as rapidly as the much-burdened railroad can deliver gravel from the interior at Colon. Many of the needed surface drains have been constructed, and the work is being pushed.

The gutter over which was stretched the awning a quarter of a mile in length, described by the writer of the article, was a part of the drainage system under construction. The writer says that the awning was for the purpose of protecting laborers from the sun and ridicules the device as midsummer madness. The awning is described in the annual report of the sanitary department. Had the writer made inquiry of any official responsible for the awning, he would have learned, as I do from reading the annual report of the chief sanitary officer for October last, that the awning was stretched over the gutter to enable the laborers to work in storms and also to protect the fresh concrete from the heavy fall of rain, which before the awning was used had destroyed the soft material and prevented its setting in proper form. But it was apparently no part of the purpose of the writer to obtain the evidence of officials who knew.

The sanitary authorities of the Isthmus have been exceedingly diligent in doing everything possible by enforcement of proper health regulations to prevent the spread of disease in Colon. It is not true, as averred by the writer of the article, that a large number of the employees on the Isthmus live in the city of Colon proper, where this swampy district is. As Mr. Stevens points out, only a small percentage of them live there; not to exceed two or three hundred. The population of Colon is chiefly made up of those who lived in Colon under the Colombian régime, and of those persons who have come to the Isthmus and have been too lazy to work and have therefore been refused permission to occupy the buildings of the Canal Commission along the canal route. The laborers who arrive from the West Indies are not permitted to remain in Colon, but are taken out to the camps along the line of the railway and canal.

The reports of the chief sanitary officer show that in the year November 1, 1904, to November 1, 1905, a portion of the sanitary work done at Colon and Cristobal, which are practically the same settlement, was as follows:

Cartloads garbage removed.....	15,919
Cartloads night soil removed.....	9,319
Cartloads debris and street dirt removed.....	1,465
Blocks of streets cleaned.....	7,494
Tanks and barrels covered.....	4,247
Tank and barrel covers made and distributed.....	195
Cement drains, linear feet.....	2,501
Ditches constructed, linear feet.....	1,690
Houses fumigated.....	1,548

Besides which a large area has been denuded of vegetation and drained, lagoons cleaned, premises cleaned, roadways, drainage troughs, culverts and bridges, and other works of construction in connection therewith. The drains are all to be a part of the new system.

Governor Magoon reports by cable of January 8, 1906, that streets are in splendid condition in Colon; that since October 17, 1905, two principal lengthwise streets and three cross streets have been raised

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and rebuilt; that two lengthwise streets and three cross streets have been ditched and graded and ready for top dressing; that 1,043 cubic yards of gravel have been used to date; that 5,041 feet of concrete gutters have been built; that the work of raising and rebuilding all streets in the unpaved portion of the town will be completed by the end of the dry season in April; that one block of the drainage canal bisecting the town has been constructed, and is now progressing at the rate of 30 feet a day; that it will be completed at the end of the dry season. He reports, however, that it will be impracticable to undertake a permanent domestic or house sewer system for Colon until the commencement of the permanent improvement of the city. He further reports that model quarters for the negro laborers in Colon, with concrete floors and shower baths, are rapidly approaching completion.

The Government is charged with indifference as to the food supply of the laborers. In my letter of January 3, 1906, transmitting the annual report of the Commission and the annual report of the railroad company, will be found an account of the Markel contract for feeding laborers and employees of the Canal Commission and the railroad company on the Isthmus, and the very diligent efforts that have been made in this regard are sufficiently set out there in the matter of refrigerating plants, the establishment of hotels, the establishment of a commissary, the establishment of boarding camps, and every device known in the business of great works of construction has been adopted in the Isthmus to secure good food both for the laborers and the employees of higher class. The mere assertion that in a market house visited by the writer there was not shown care in the preservation of meats and of other articles of food therein exhibited for sale is made the basis for a broad generalization that the Government is indifferent to the food furnished to its employees. The slightest examination by anyone anxious to find the truth would have shown the elaborate, anxious, and most careful preparation for the receipt of meats and other foods, their proper preservation, and their being furnished at reasonable prices to the employees of the railroad company and of the canal.

The writer of this article makes the following statement:

"Mr. Taft promised officially that by December 1 Colon would have a splendid water supply. There is to-day no water supply in Colon. Mr. Taft does injustice to his countrymen by treating flippantly questions involving human life by the thousands. We are not all children or fools. We do not need reports which read like the circulars of doubtful land companies."

In the first place, I have no recollection of making any official statement as to when water would be furnished for Colon. All that I have said was in my annual report, under date of December 3, 1905, and in an address at St. Louis on November 18, 1905, that reservoirs were being constructed for Colon, together with a water-pipe system. The writer says that there is no water supply at Colon. Mr. Stevens says there is. It should be borne in mind that Colon and Cristobal, although one is in the Canal Zone and the other is in the Republic of Panama, are parts of the same settlement and that Cristobal is not five minutes walk from the center of Colon. In a dispatch from Governor Magoon on January 8, 1906, I am advised that of the two temporary reservoirs for Colon and Cristobal water supply one was completed on November 1 and the other in the latter part of December; that the total capacity is that of 80,000,000 gallons, amply sufficient for the present dry

season; that 7,000 feet of permanent mains have already been laid and that the remaining 9,000 feet are being laid at the rate of 400 to 500 feet daily; that there are six tanks, with a total capacity of 65,000 gallons, held in reserve at Cristobal in case of accident; that a complete permanent distribution system will be completed by the 1st of May; that the present Panama Railroad water system, which is now furnishing water for Colon from a reservoir at Brazos Brook, will be connected with the permanent feed mains before January 15, and free public distribution stations will be opened then, supplying all of Colon; that the Colon people are now securing water from tanks, as in years past, and from the public hydrants in Cristobal, and that permanent water mains, including fire service, will be completed on the principal streets in Colon by the end of the dry season, April 15, supplying the entire city; that there is no scarcity of water in Colon; that a permanent reservoir capacity of 500,000,000 gallons is under construction, with two permanent standpipes, one of 400,000 and the other of 500,000 gallons capacity, under contract to be completed by April 1.

The statements of Mr. Stevens and Governor Magoon are at variance with those of the writer of this article.

Governor Magoon advises me that Mr. Tracy Robinson, from whom the writer of this article seems to have obtained most of his information concerning Colon, last week visited the new reservoir at Mount Hope for the Colon and Cristobal waterworks, and told the resident engineer that he had not seen the work before and was greatly surprised and gratified at the progress made. It is unfortunate that Mr. Robinson had not seen the waterworks for Colon before supplying information to the writer of this article.

Complaint is made of the rents in Colon. It is quite possible that the rents in Colon are too high. The railroad company owns the fee of a large part of the lands in Colon which are let on short leases, a system adopted before the Government took charge of the canal and railroad property. This has resulted in the construction by middlemen of very poor houses and the letting of them at advanced rents. A plan has now been approved by the Commission for the renting of such railway property as can be safely leased on terms of years sufficiently long to permit the erection of permanent structures.

The next class of charges is concerning the treatment of the negroes. The first accusation is that negroes have been invited to the Isthmus by a statement that they would receive \$1.50 gold, whereas when they were brought to the Isthmus they were paid not \$1.50 gold, but 75 cents gold. This charge is made on the authority of a negro whom the writer of the article met in the street. We do not know his name, and it does not appear that the writer of the article knew his name, or anything about him except that he was a negro well dressed. The answer to the charge is that it is not true, that the rates of wages are well advertised throughout the islands of the West Indies as 10 cents gold an hour for a day of eight hours, which may be increased by diligent work to 13 cents an hour, and no other statement is authorized to be made.

It is said that a great prejudice exists against negroes in the railroad management, and that it is exerted against them to their harm in every way possible. The answer to this is that the charge is not true, as Mr. Stevens testifies, and anyone who has been on the Isthmus with an unprejudiced eye and ear will corroborate him in this statement.

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There is real danger that the laborers, all of whom are negroes, are paid and treated too well, a circumstance which gives them a motive for knocking off labor whenever possible.

It is charged that the chairman of the Commission and all others wrongly look upon the tropical negro labor as poor labor. The conclusion of Mr. Stevens and of every observer on the Isthmus is to the effect that this labor is inefficient. Mr. Stevens gives the figures which justify this view. The announcement by the writer of the article that the labor problem is an easy one is the merest nonsense in view of the actual experience that Mr. Stevens and others have had in working these tropical negroes for more than a year upon the Isthmus.

The writer of the article renews a charge, long ago completely refuted, of the mistreatment of a certain boatload of Martinique negroes who were brought to the Isthmus, and who were required to be vaccinated upon landing. They declined to land if they were to be vaccinated. They were therefore refused the right to land by the quarantine authorities. Thereupon the owners of the ship demanded the fare back to the place from whence they had come, which the men were unable to pay, or refused to pay. The captain of the ship then demanded that they be taken out of the ship, which they had no right further to occupy. This was done, they were vaccinated, and then they were received as employees by the Canal Commission. The official report of this transaction, including that of the French consul, who investigated the matter, is appended hereto.

It is said that the negroes are leaving the Isthmus in portentous numbers because of mistreatment. As a matter of fact, Mr. Stevens testifies that just before the holidays a great number of laborers return to the islands whence they came. This has been the custom ever since the beginning of the French construction. Many of the laborers leave their families, and because transportation is cheap are able to go back and then return. If any such desertion on the Isthmus by the laborers was at hand, there certainly would be some other evidence than the unsupported testimony of the writer of this article. As a matter of fact, it has been possible to bring the number on the pay roll up to 17,000 laborers, and to maintain that number.

It is relevant to the charge of mistreating negroes to say that Great Britain has a most competent consul in the person of Mr. Mallet, who has been consul-general of the British Government for twenty-odd years; that the negroes coming from the British West Indies are prone to bring before him every complaint of the slightest character. I had a conversation with Mr. Mallet when I was on the Isthmus in November, and he told me he had made an investigation and found that everything was being done that was possible for the proper treatment, housing, and feeding of the negroes. A report from the French consul, charged with looking after the negroes who come from the French West Indies, is to the same effect. The views of Sir Alexander Swettenham, and the chief justice of Jamaica, if correctly reported, I am, of course, unable to discuss, but I venture to think that the evidence of the consuls on the ground, whose duty it is to look into this matter, is rather to be trusted than that of officials more than a thousand miles distant. The truth is, in respect to the island of Jamaica, the authorities of the islands view with reluctance the departure of the laborers to the Isthmus. This is natural, because it reduces the labor supply in the islands and increases its cost.

Finally, the writer of the article charges that the administration of justice in the Zone is anti-negro, oppressive, and ridiculous. He bases his charge on accounts of two trials given him by two laymen, without any investigation himself, without interviewing the prosecuting witnesses, and without learning anything about the facts except as stated by two outsiders whose names are not vouchsafed to us. The administration of justice in the Zone is conducted by a court, of which Señor Mutis Duran, one of the leading lawyers of Panama, is chief justice. He was formerly governor of the Isthmus under the Colombian régime, and a gentleman who speaks English and Spanish with equal facility. His colleagues are Judge Gudger, who is a brother of Congressman Gudger, of North Carolina. Judge Gudger was consul-general on the Isthmus for four years, and speaks Spanish fluently, and by reason of his experience as consul-general has made himself very familiar with the local laws of Panama. The third judge lives at Colon, and is Judge Collins, who for two terms presided as judge of the superior court in Chicago, Ill. It would be difficult to select a better court than this one for the duties which it has to discharge. It is true that the law as between individuals in the Zone is the law of Panama—that is, the civil law as derived from Spanish sources. The criminal law, however, was enacted by the Canal Commission in a criminal code like that of one of our States, and the code of procedure is also of American origin. It is not true that the people who are brought before the court generally speak Spanish. As a matter of fact, the great majority of the negro laborers are Jamaicans, and they speak English. The American officials, of whom there are about 2,000, of course speak English. It is necessary, therefore, to have a court in which both English and Spanish are understood.

Coming next to the charge that the officials on the Isthmus were appointed through Congressional or other political influence, it is sufficient to say that the chief engineer categorically denies this, and I am able from the standpoint of Washington also categorically to deny it. The appointment of officials has been under the civil-service law ever since the summer of 1904, and political influence has played no part whatever in the selection of the persons appointed to places on the Isthmus. The chief engineer, by special exception of the President, has himself exercised complete discretion in the selection of his engineering force, while the clerical force has been obtained purely by civil-service law methods. There has been great difficulty in securing under the civil-service law methods men for out-of-door work on the Isthmus—skilled mechanics, track layers, carpenters, and others—but certainly the defects in their qualifications which have been found to exist have never been due to the exercise of political influence. The physicians in the sanitary department have generally been transferred from the Army Medical Corps, the Navy Medical Corps, or the medical corps of the United States Marine-Hospital Service, and they have proved to be brave, earnest, and most efficient men.

I come now to the charges of misconduct or acts evidencing incompetency and neglect in the officials in charge of the work. There is a charge of delay by red tape in the construction of buildings on the Isthmus. This is shown to be untrue by the statement of the chief engineer, who is more familiar with the facts than anyone else can possibly be. It is charged that a grievous error was made in the placing of a large hotel at Corozal, within 3 miles of Panama; that it was placed in

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a swamp and "a hog wallow," and that because of its unhealthy site it is wholly unoccupied. With respect to this I can testify personally that I have seen the hotel, that it stands upon high ground, and that the drainage about it is good. The former swamp of which complaint is made was a considerable distance away from the hotel, and has been well drained, as Mr. Stevens testifies. Mr. Stevens adds that he knows the hotel to be full. It is quite possible that in the middle of the day the hotel appeared empty because those who occupy it are the employees of the Commission whose work is generally in Panama, and who leave it in the morning and return to it in the evening.

It is alleged on the authority of an engineer, whom the writer of the article consulted, that the dredges in the Culebra cut were not working to 20 per cent of their promised capacity, and that one of them had capsized because of the slipping of the earth from under it. This I presume may be taken as an indication that the writer of the article, abundant as his opportunities for observation were, did not visit the Culebra cut, because if he had done so he would have known that there are no dredges within a long distance of the Culebra cut, and that the instruments there being used are steam shovels. Of course, an error by which one calls a steam shovel a dredge is not significant in a layman who professes to know nothing of engineering or of construction work, but when the layman professes to pass on nice engineering questions, and to state that all engineering difficulties in the construction of the canal have vanished, or that deliberately formed plans of competent engineers are outrageously amateur, as the writer of this article does not hesitate to do, it would seem unfortunate for him not to be able to tell the difference between a steam shovel and a dredge.

The answer to the charge is that the excavation which is being made is not being made under circumstances in which it is expected that the shovels shall be used to their utmost capacity. They are being used in the construction of roads at different levels up to the place where the real excavation is to be begun. Mr. Stevens's answer upon this point is full and satisfactory.

Finally, criticism is made of the sewer system of Panama, and the question is asked why any sewer was built at all. It may be that there are some cities so situated that sewer systems are not to be attempted, though in every city of any progress that I know such a system is deemed to be best. The city of Panama is quite high enough above the sea to give a sufficient fall for a gravity sewer, and the tidal ebb and flow of 20 feet is quite strong enough to carry the sewage out to sea and beyond the risk of injury to health. The sewer system was entered upon because the treaty required the Government of the United States to collect and dispose of sewage in Panama. It was designed by an engineer of large experience in sewers, appointed by Chief Engineer Wallace; the design was approved by Mr. Wallace, and subsequently, after protest was made against it, the design was examined by Chief Engineer Stevens and was approved by him. The statement that the water has backed up in it and that it has failed to discharge the proper functions of the sewer Chief Engineer Stevens says is not true. And this is the answer to the charge.

It is next charged that quarantine officials construe the law and enforce it as far as possible to interfere with commerce. This is utterly unfounded. The Isthmus of Panama is being rapidly freed

from danger of yellow fever and other contagious diseases by an effort unprecedented in the history of the world. It is surrounded on every side by disease-breeding ports, from which yellow fever, cholera, smallpox, diphtheria, and bubonic plague could be introduced. It is of the highest importance therefore, if the work which is done upon the Isthmus is to remain permanent, that the quarantine should be strictly enforced. On the other hand, with respect to yellow fever and many of the other diseases, the inhabitants of the Isthmus regard themselves as immune, and therefore naturally resent the strictness of the quarantine against such diseases, while they are greatly alarmed over importation of bubonic plague. That is what gives rise to the charge which the writer of the article so eagerly embraces and makes his own.

Again, it is charged that an impertinent health officer, prejudiced against an old negro woman, required her to pour out her rain water. This is presumably on the authority of the old woman. I doubt the necessity for answering a charge resting on such flimsy evidence. It is quite certain that the water which for any reason she might be required to pour out was water promoting the generation of mosquitoes—the deadliest foes of man on the Isthmus.

Again, it is charged that the American medical chief ordered instruments purchased in America which a Panama official wished to purchase in Germany at a cheaper rate. It is sufficient to say, with reference to this charge, that the Commission and all the officials are directed in the purchase of goods that they shall purchase where the market is cheapest, but that as they are Americans, and as they are more familiar with American markets than elsewhere, and that as transportation from America is easier than from elsewhere, it is quite reasonable that the great bulk of purchases should be made in America.

Again, an exploded slander against the Commission, that under its authority a boat load of black women were imported from Martinique for immoral purposes, is repeated by the writer of the article. When the statement was made on the floor of the Senate, I authorized its denial as false and forwarded to the Senate the documents upon which that denial rested. In order that they may be of easy reference, I append them to this letter. I repeat that this statement is wholly false.

Again, the writer of the article occupies a considerable space in attacking the members of the advisory board for not having made a sufficient investigation into the proposed situs of the canal. The fact is that under the lead of General Davis, who had been governor of the Zone and was very familiar with all the territory of the Zone, the twelve members of the advisory board spent 7½ days on the Isthmus and made an extended examination of the proposed situs of the canal and its appurtenances, involving much physical exertion. It was quite sufficient and quite minute enough for them to pass upon the proper type of the canal. Moreover, five of that number had already been on the Isthmus and had spent days and weeks and months upon the Isthmus in the investigation of the same thing. The slur upon the members of the board that they were afraid of contracting yellow fever and thus avoided exposing themselves along the line of the canal is too contemptible for answer.

Finally, I come to the charges specifically made against the Secretary of War. They consist in a refusal to accept the guidance of Mr. Tracy Robinson in visiting the purlieus of Colon, and a refusal to have an interview with Mr. John Jardie, chief engineer of the electric and

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refrigerating plant in Panama. To the first charge I plead guilty. My communication with these persons was by letter. I append the correspondence, which speaks for itself and explains the reason for my failure to grant Mr. Robinson's request. I may note that the writer of the article seeks to give the impression that Mr. Lundie's application for an interview was made in the interest of the negro laborers on the Isthmus. The correspondence shows how unfounded this is, and that in fact Mr. Lundie did not ask for an interview at all.

In November of 1904 I visited the Isthmus, chiefly for the purpose of carrying on negotiations with the authorities of the Republic of Panama, in order to settle differences which had then arisen between that Government and the Canal Commission with respect to the Commission's political administration in the Zone. I spent eight days upon the Isthmus, but only two of them were devoted to observation of the line of the road and the possible line of the canal and conditions in Panama and Colon. The rest of my time was taken up with conferences which resulted in a settlement which, so far as it went, has continued to be satisfactory down to the present time.

My second visit was in November, 1905. The visit was undertaken both for the purpose of conferring with the authorities of Panama as to some new matters of difference that had arisen, and also to examine the amount of work which had been done upon the Isthmus since my last visit there. I have already stated in an extended address the result of my observations. I lived at Ancon, on the Panama side, during the five or six days of my stay on the Isthmus, visited all the places where work had been done—La Boca, the Culebra cut, Obispo, Empire, Cristobal, and all the other places where are gathered in greatest numbers the laborers under the Canal Commission. I did not attempt to go "slumming," as the phrase is, for the reason that when I was on the Isthmus I heard not a single complaint of the treatment of the negroes. With respect to Mr. Tracy Robinson's invitation, I heard that Mr. Robinson was a householder and a house landlord in Colon, and that he was especially interested in the improvement of Colon, and accordingly I answered him that the improvement of Colon was about to be begun, that the plans had been agreed upon, and that he might count on the work being done. I was on the Isthmus quite sufficiently long to learn by actual observation the difficulties that exist in the proper drainage of Colon and putting it in proper sanitary condition.

Having thus gone over and stated the evidence which contradicts the charges made by the writer of the article, I now come to weigh the conflicting testimony and to examine into the opportunities for observation which the writer of the article had. I learn from the Isthmus that the writer arrived in Panama on the Royal Mail steamer *Trent* from Jamaica and left by the same steamer. The steamer docked at 10 o'clock on the morning of the 30th of November and sailed at 2 o'clock on the afternoon of December 1. Assuming that after landing and docking the writer at once began work, it is not unfair to say that his opportunities for observation were limited to twenty-eight hours, including daytime and night time. It would seem not to be a very long period in which to look carefully into and determine the character of the engineering difficulties of the greatest constructive enterprise yet undertaken by man, the efficiency of tropical negro labor, the healthfulness of a city, the proper place to put dredges, the

proper amount of capacity to obtain from steam shovels, the character of the administration of justice, the proper position of hotels along the line of the road, the question whether a sewer system should be adapted to Panama at all, or whether the sewer system as established was sufficient for the purpose. Nor does it seem to offer the abundant opportunity for examining opposing witnesses on controverted issues which the writer of the article assures us that he had. The "many things on the spot" which he says he was able to examine must, therefore, be taken with some qualification. In view of the time which this critic—a man with no knowledge of engineering whatever—took to decide all the questions which arise in the construction of the canal and pronounce them of altogether vanishing difficulty, he should not take exception to the seven or eight days which twelve of the most distinguished engineers in the world in canal construction devoted to the same task.

But the writer of the article will answer, "I did not depend upon my own observations alone, but I consulted witnesses;" and he certainly did. Two witnesses we are able to identify. The others are unnamed, and most of them are negroes from the West Indies, whose names, history, character, reputation, or profession the writer of the article in all probability did not know. The two witnesses whom we identify are Mr. Tracy Robinson and Mr. John Lundie, and I propose now to examine the impartiality and the freedom of bias of these witnesses.

Mr. Tracy Robinson is the owner of property in Colon. I do not charge that the rents he collects are too high; I do not know. I am reliably informed that he is one of those who has raised his rents on the ground of improved conditions in Colon. He is, however, pecuniarily interested in having invested in Colon as much Government money as possible to improve his holdings in that city. He has lived forty years in Colon, and most of it when the town was in a condition far worse than it is now. His animus against the Government is because it devoted its first attention to the expenditure of money in Panama and thus raised the value of property in that city, and, secondly, that in the enforcement of the health regulations by the sanitary department in Colon he found it necessary to complain that his vested rights were being interfered with, although what he was required to do was only that he should observe the necessary rules of hygiene in his property. He is willing to have sanitary regulations enforced against his neighbors. Thirdly, Mr. Robinson applied to the former chairman of the Commission for an appointment with not less than \$5,000 a year salary; was offered the mayoralty of Cristobal at \$1,800, but declined it with indignation as being unworthy his talent and social standing. He again applied to Governor Magoon for a position and was informed that there were no vacancies. Subsequently he asked to be made superintendent of schools of the Zone and was not appointed because Governor Magoon thought his age and temperament unfitted him for the position. Mr. Robinson is an elderly gentleman with nothing to do but to collect rents and to talk to strangers who visit his town, and is the source of many prejudiced reports against the Government coming from the Isthmus.

The other witness whom we can identify is Mr. John Lundie, and in order to understand his impartiality in the criticism of the Government I shall, at the risk of prolixity, give a little of Mr. Lundie's history. He is an electrical engineer. He was employed to visit the

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Isthmus in order to superintend the construction of a plant for the generation of electricity and the manufacture of ice by a private company. Under the treaty made with the Republic of Panama, it became the duty of the United States to construct a water supply and drainage for the city of Panama. The question for the Commission was where it could best secure a proper supply of water in the quickest time and at the least expense. It found a reservoir partly constructed, about 11 miles from Panama, immediately on the line of the railroad, and the water, when examined by experts, proved to be and is potable. It had the advantage of permitting the use of the right of way of the railway company clear from the reservoir to the city without expense. It permitted the use of the railway for the hauling of pipe and other material necessary in the construction of the waterworks, and the reservoir has now been completed, the pipe has been laid, and water flowed on the 4th of July last. The water system now extends throughout the city of Panama. Before work was begun, a syndicate of Panamanians desired that the water should be brought from a source some 16 miles from Panama, far off the line of the railway. For this rival project it would have been necessary to condemn nearly all the right of way. The syndicate were interested in the property near where the water supply was and through which the pipe must be run. In their interest a series of articles appeared in a newspaper in Panama attacking the plan for the present water supply in the most vicious and denunciatory terms. These letters were written by Mr. John Lundie, whose assistance was invoked by the syndicate. I make this statement on the authority of Gen. George W. Davis, then governor of the Canal Zone.

Subsequent to this, Mr. Lundie, having made his peace with Mr. Wallace, made formal application to become one of the advisory board of consulting engineers to report upon the proper type of canal. He did this avowedly because it would do him good in his business. Mr. Wallace good naturedly recommended him. Mr. Lundie visited me and urged his appointment with great vigor. He became so persistent in forwarding his own candidacy and so annoying in his importunities that, with your concurrence, I telegraphed to Mr. Wallace at the Isthmus to advise Mr. Lundie, who was then there, that his application for appointment was rejected chiefly on the ground of his undue and improper persistence in seeking a place of this character.

Just as Mr. Wallace left the Isthmus he appointed this same Mr. John Lundie as consulting engineer, at a salary of \$500 per month, to make a report of oils and fuels on the Isthmus, subject to the approval of the chairman of the Commission. Mr. Wallace's action was disapproved by Mr. Shonts, and Mr. Lundie was not appointed.

Mr. Lundie is the chief engineer of the ice and electric plant already referred to. It has a capital of \$250,000, which was furnished partly by Americans and partly by Panamanians. Mr. Lundie understands correctly that the Government expects to erect at Colon its own refrigerator plant, and that it proposes to furnish its own electric light. I believe that Mr. Lundie's company now derives some business from the Government. Mr. Lundie objects seriously to the Government's furnishing its own light and ice, and insists that it is its duty to patronize his company. It was to enter this protest that he wrote to me while I was on the Isthmus. When he found that his arguments upon

this point were not thought to be weighty enough to prevent the Government from carrying out its plan, he wrote to you, Mr. President, a letter which exhibits the spleen and insolence of the man and the extent to which prejudice will carry him in making unfounded statements. I append his letter to you, together with his correspondence with me and with the Canal Commission. It is noteworthy in this connection that not only are the statements of fact contained in this letter repeated in the magazine article under discussion, but some of the reckless and impudent vocabulary of the letter appears in the article without change. This makes it quite certain that a copy of Lundie's letter to you was shown to the writer of the article. The writer's willingness to draw his facts from such a fountain of manifest malice, injured vanity, and disappointed ambition, as Lundie's letter, completely refutes his good faith in asserting his wish to find and state the truth.

In the completion of the sewer system the plan carried a part of the sewer in Panama through property controlled by the company of which Mr. Lundie is the chief engineer and at present manager. He objected to the place where the pipe was to be put. The matter was brought to the attention of Chief Engineer Stevens, who went over the matter and insisted that their way was the proper way to go. Mr. Lundie conducted himself in such a way as to create a bitter personal difficulty with Mr. Stevens. The matter was then submitted to the mayor of Panama, who upon examination determined that Mr. Stevens was right, and the pipe was laid in accordance with the views of the Government. This probably explains Mr. Lundie's views, filtered through the writer of the article, that no sewers are needed in Panama, and that the adopted plans are outrageously defective, and also the unfounded statement that the filth of sewerage has backed up in the city of Panama, and that the sewers as constructed do not discharge their proper function.

The witness who has had the best opportunity for observation with respect to the truth of the charges made in the article is Mr. John F. Stevens, the chief engineer of the canal. Mr. Stevens is an engineer of thirty years' experience. After the fullest inquiry of many railroad men, I do not hesitate to say that there is no engineer in this country better fitted to do the work which he has under hand to do than Mr. Stevens. Mr. James J. Hill, the president of the Great Northern Railway and one of the leading railroad constructors in this country, told me that he had had experience with Mr. Stevens as his engineer for thirteen years, and that, taking him all round, he was the best man in the United States that we could secure for chief engineer of the work. When, therefore, Mr. Stevens states facts with reference to the conditions which exist on the Isthmus, with reference to the engineering questions that obtain there, with reference to the proper position of dredges, or the difficulties attending the sanitation of a particular locality, no fair-minded man will hesitate one moment to accept Mr. Stevens's statement as against that of the writer of the article or Mr. Robinson or Mr. Lundie.

The writer of the article says that he proposes to state the truth from the standpoint "neither of an officeholder nor an office seeker, much less that of a disappointed contractor or an invalided laborer;" that "he has had abundant opportunity to hear the views of opposing witnesses" and was in a position "to examine on the spot many things

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so far conspicuous for their absence in so-called 'official' and authoritative reports." He then, with an apparent earnest desire to show his impartiality, says that we must make allowance for a generous amount of professional jealousy which induces one engineer to speak slightly of a competing colleague. It will be observed that from the beginning to the end of the article the writer shows that instead of seeking evidence from the officials responsible for the work on the Isthmus he deliberately avoided consulting them or giving them any opportunity whatever to state their knowledge or explanation of the facts which he says had attracted his attention. It is true that in weighing the evidence of officials charged with responsibility for work the natural desire of human nature to make the best showing for itself ought to be considered in estimating with what qualification the statement is to be received. But what shall we say of the justice and impartiality of an investigator who deliberately excludes from the witness stand all the men who have the best opportunity for observation by reason of months and years of experience on the Isthmus, merely because he says that they are prejudiced, and who then resorts for his evidence to witnesses who are disappointed office seekers and in other ways are as prejudiced as those whom I have above described? When the actual facts are compared with the statements in this article, it gives rise to doubt what the real explanation of the article is—whether it was written from such a wanton motive as actuates a pure sensation monger, or whether it arises from the exaggerated eccentricity of mind which furnishes both an excuse and an explanation.

Very respectfully, yours,

WM. H. TAFT,
Secretary of War.

EXHIBIT A.

[Memorandum of comments of the chief engineer of the Isthmian Canal Commission, on article written by Poultney Bigelow, M. A., as published in the Independent of January 4, 1906, entitled "Our mismanagement of Panama."]

Mr. Bigelow, in his argument, brief, or by whatever name his indictment might be designated, premises by saying that he has had abundant opportunities to hear the views of opposing witnesses, and has also been in a position to examine on the spot many of the things which have so far been conspicuous by the absence of any official and authoritative reports. As for as creditable evidence goes to show, Mr. Bigelow arrived at Colon on the Royal Mail steamship *Trent*, which docked on November 30; that his stay on the Isthmus, which afforded him, as above noted, according to his own words, "abundant opportunity," etc., extended over a period of time which ended with the sailing of this same steamship *Trent* on December 1, and which covered, including hours of day and night, 28 hours. He says that the strictly engineering and technical difficulties in the way of building the canal have vanished.

This statement, if trustworthy, takes a great load off the mind of the executive officials, particularly the chief engineer, who is intrusted with the management of the carrying out to a successful conclusion of the most important and most extensive engineering work which history to this time affords, and the chief engineer takes this opportunity to disagree most decidedly with Mr. Bigelow in his conclusions as to the vanishing of the engineering and technical difficulties in the construction of any practicable canal at Panama. The difficulties exist, but they are, as the chief engineer has repeatedly reported, those of dimension or magnitude. They can be solved. They are in process of being solved, and that they will be solved successfully is beyond question; but to assume that they have already vanished, simply because a gentleman who is wholly without experience in or knowledge of the subject has declared that they no longer exist, is absurd.

With Mr. Bigelow's deductions that the construction of the canal is a feasible project the chief engineer is heartily in accord, and without going into the details on this point it will suffice to say that this statement is about the only common ground, as set forth in the article referred to, upon which the chief engineer and Mr. Bigelow agree.

It is of course assumed that the three conditions to which he calls attention, "money, labor, administration," as essentials to the successful completion of the Panama Canal are, as general propositions, correct. His assumption, also, it is believed, that we have money enough, is undoubtedly true. The American people are not in the habit of putting their hand to the plow and looking back.

The statement that there is plenty of labor to be had for the asking is correct in its broadest interpretation, but Mr. Bigelow's whole argument seems to be that the present labor, which is West Indian almost exclusively, is or should be satisfactory. As a matter of fact, it has been conclusively shown to be unsatisfactory.

The plain facts are these: In quantity the most available labor which the Commission has been able to obtain up to the present for the execution of its preparatory work in the construction of the canal has been colored labor from the West Indian Islands, principally from Jamaica, Martinique, Barbados, and a few Colombian laborers, mostly from the vicinity of Cartagena.

That this labor possesses a certain efficiency and consequent value can not be denied. That it is at all comparable with our labor here in the United States it is sheer nonsense to assert.

As an employer of the various kinds of labor last enumerated for thirty years, in direct contact with same, the chief engineer desires to place himself upon record now, as he has heretofore, to the effect that colored West Indian labor is not, as a general average, equivalent in effective potentiality to more than one-third, or 33 per cent, of our home labor.

The causes for this are undoubtedly many. It does not need any argument to show that with a birthright induced and colored by generations of residence in the Tropics the ambition, the industry, the forethought that obtains in the temperate and semifrigid zones is entirely wanting in natives of the Tropics. The West Indian negro, as a rule, possesses no ambition, as ambition is known to the population of our northern latitudes. When a native with a family, under the tropical conditions which exist in Panama and similar localities, can take his machete, which is his universal working tool, and go into the jungle and within twenty-four hours can cut cane and with abundant thatching can make a shelter for himself and family, pluck bananas, and dig roots, there remains nothing more for him to obtain to support animal life, and therefore the great incentive which underlies all human actions—that of providing first for our purely animal wants, then our social and literary desires—is entirely wanting.

To illustrate: To-day upon the works of the Panama Canal the weekly and daily force reports show that on Monday the labor ranks are fairly full, on Tuesday they are less so, and on Wednesday a decided shrinkage in the daily force account is shown, and tapering down until Saturday the force has diminished to such an extent that many of the lines of work are paralyzed, which shows that the mental capacity of the average West Indian negro is limited to the extent that he can in most cases realize his necessities for earning a wage sufficient to cover his animal wants for seven days, and that owing to the high wage which the Commission is paying, as soon as two or three days of the week have gone by and he can see five days ahead, his desire to work entirely leaves him.

The situation at Colon, formerly Aspinwall, is unique, the town being built on Manzanillo Island, which is really a peninsular surrounded by the bays which are a part of the Caribbean Sea, and topographically the average height of this island above mean tide is not more than 1½ feet, but it is just as high as it has been for the last four hundred years, and the conditions which Mr. Bigelow described and exaggerates have obtained certainly ever since the construction

of the Panama Railroad, or at least fifty years. These conditions are not what they should be, and the solution of the sanitary proposition of Colon is one which requires investigation and to which the proper remedy can not be applied without due consideration.

Owing to the uncertainty as to the type of canal to be adopted, the solution of the Colon sanitary proposition has been somewhat delayed. If the construction of a canal involving relocation of the same from Mindi, direct to the open waters of the Caribbean Sea, through what is known as Boca Mindi, is adopted, then Colon will naturally disappear from the map, and the real terminus at the north end of the canal will be at an entirely different point, and any money spent toward permanent improvements at Colon will be simply thrown away. But this fact has not prevented the Canal Commission from giving full consideration and attention to the sanitation of Colon, it being the recommendation of the chief engineer, which is indorsed by the entire Commission, that owing to the length of time which will be required in the construction of any canal, the justification for a considerable expenditure at Colon to make sanitary conditions as they should be, is ample.

One of the first matters which was taken up by the present chief engineer on his assumption of the office on the Isthmus, practically August 1, was the condition of Colon, and after a thorough individual and personal study of these conditions, he reported to the Commission, under date of September 30, certain concrete conclusions in regard to the entire matter, to the effect that the matter should not be delayed, and that some effective proposition should be taken up looking toward the sanitation of Colon, and to this end, under date of September 22, he appointed, with the concurrence and approval of Governor Magoon, a committee of five to consider the entire matter as quickly as possible and to make a report upon the best mode of procedure.

This committee, consisting of the representatives of the department of engineering, the division of municipal engineering, the sanitation department, the Panama Railroad, and the Government of Panama, reported, under date of November 8, which report was submitted, by and with the approval of the chief engineer, to the Commission, under date of November 17, and after the recent arrival of the chief engineer in Washington the matter was thoroughly considered at a full meeting of the Canal Commission on January 2, the work was approved, and will be gone ahead with just as fast as circumstances will permit.

Mr. Bigelow's information, outside of his own observation, seems to have been largely drawn from a merchant by the name of Mr. Tracy Robinson. Personally it is known that Mr. Tracy Robinson has been an inhabitant of Colon for upward of forty years; that he boasts of his good health during that entire time, of his hale and hearty vigor at a very advanced age, and speaks of it with every indication of pride that health conditions at Colon are, and always have been, thoroughly misrepresented, and that it is a healthy place for white people.

If Mr. Robinson, during any time of the forty years covering his residence at Colon, has ever, as a leading citizen, evinced any disposition to take a step to make Colon—which Mr. Bigelow says it is not—a safe place for residence, then the records and traditions do not bear

any such evidence. On the contrary, every effort which the sanitary department of the Isthmian Canal Commission has made looking toward the betterment of conditions in Colon, pending the adoption of a permanent plan for improvements, has been fought step by step by Mr. Robinson, as letters of his to the sanitary department will fully show.

Mr. Robinson is the more or less fortunate possessor of a large number of buildings in Colon, which he has under rent to different parties, and his whole effort has been, and is yet, to thwart the efforts of our sanitary department to ameliorate existing conditions when they touch him or his property interests in the least. In other words, he is perfectly willing that the sanitary conditions of his neighbor's property shall be improved, but insists that his shall be left strictly alone.

Intelligent, well-digested plans have already been adopted for the sanitation of Colon, and the expenditure of the necessary money has been approved. But the fact must be borne in mind that of the 12,000 or 15,000 laborers now on the canal work not over 2 per cent of them live in Colon. The balance of the 10,000 people to which Mr. Bigelow so pathetically draws attention are the flotsam and jetsam of the irresponsible, idle, and totally inefficient class who have not availed themselves of the opportunities for steady and remunerative work offered by the Isthmian Canal Commission. In other words, instead of being out in camps or on the line of the canal, miles from the scenes at Colon which Mr. Bigelow so vividly describes, they are huddled together in this populous center, while the Commission is bringing in daily men to take the places which they should be occupying on the work proper.

Of the sanitation along the line of the canal and at Panama nothing need be said further than to refer to what has already been set forth by Secretary Taft and Mr. Shonts. It is not believed that in the world's history a more intelligent, more effective, more comprehensive effort has been made, and more satisfactory work been done along sanitary lines than by the sanitary department under Governor Magoon, Colonel Gorgas, and his staff. The reports of the medical department are open to public inspection. Copies are herewith submitted. They give facts and not theories. They can not be gainsaid. They are honestly made, and they show that to-day and for several months past the health conditions, the rate of sickness, and the death rate compare favorably with what we consider better than the average conditions in many localities in the United States proper. No arguments are needed to support this statement. The facts are there for the inspection and judgment of any fair-minded person.

Referring to quotation from the speech of Chairman Shonts, to which Mr. Bigelow alludes as follows: "Unless a much greater efficiency can be developed than is secured at present we shall have to look elsewhere for our labor." What Mr. Shonts had in mind is very clear, but on this point he is able to speak for himself. From the point of view of the chief engineer, however, this fact is incontrovertible. On the basis of the present rates of pay for West Indian colored labor, which is the lowest grade of labor, we are paying 20 cents silver per hour, and on the 8-hour basis, to which we are confined by law, it is \$1.60 silver per day, or 80 cents gold.

The relative efficiency of this labor as compared to ours at home is about three to one. In other words, we are paying to-day for this labor \$2.40 in gold, or \$4.80 in silver.

Close inspection of the different gangs, which extended over at least five months, demonstrates very clearly that the average superintendent or foreman, either white from the Northern States or colored from Jamaica and the other West Indian Islands, has never been able to work continuously more than 50 per cent numerically of the different gangs. In other words, the best white and colored superintendents and foremen which we have been able to secure up to the present time have never been able to keep more than one-half of the men of the entire gangs at work simultaneously. Instead of obtaining a fairly continuous amount of labor, as we do from gangs here at home, one-half of the efficiency of this colored labor is lost owing to their deliberate, unceasing, and continuous effort to do as little work as possible. In other words, instead of our colored labor costing us \$2.40 per day, the real situation is that we are paying twice \$2.40 gold per day, or almost \$5 for eight hours labor.

The question of the employment or the securing of proper labor is under consideration. It is the gravest one connected with the construction of the Panama Canal, notwithstanding the technical and engineering difficulty to which allusion has been made, but which latter are those of magnitude and not of mysteries, and will all be solved.

Mr. Bigelow charges that misrepresentations have been and, inferentially, are still being made by employment agents in regard to the matter of daily wages paid to these laborers which obtains on the Isthmus. This statement is unqualifiedly false. The standard rate of wages, which was adopted previous to the connection of the present chief engineer with the Panama Canal, was for labor 20 cents silver, or 10 cents gold, per hour, and no other labor has been contracted for except on this basis, with this modification: That these laborers have been told, after they reach the Isthmus and after they have been assigned to the different sections of the work, that if their labor has proved to be sufficiently satisfactory, and the openings present themselves, this rate will be advanced wherever the foreman or superintendent thinks them justifiable, to the rate of 26 cents silver, or 13 cents gold, per hour. The effect of this has been that at the present time about 50 per cent of the entire force of laborers are being paid upon the latter basis. I am referring now to common labor.

If the Jamaican negroes evince any special aptitude, it is along mechanical lines. As a small proportion of them seem to take kindly to mechanical work, in many cases the Commission has been enabled to select from the ranks of the laborers some men (but all have been engaged exactly as indicated above) as carpenters, painters, machinists, engineer firemen and runners, and for other similar classes of work, and these men have been paid accordingly. In no case, however, of which I am aware, have any of the colored laborers been engaged with this in view. In some cases they have been made foremen, and the result has not been wholly satisfactory, but in view of the exigencies of the case this has been permitted. It should need no argument, however, that the condition which necessitates the cost

of common labor on the ordinary white basis of nearly \$5 per day for eight hours can not be tolerated.

Relative to the statement which Mr. Bigelow makes as to the return, owing to the alleged conditions, of laborers to their homes in Jamaica and other islands, careful canvass of the list of deck passengers of outgoing steamers from Colon covering the period from the early part of October to the latter part of November, indicates that about 80 per cent of such passengers were for Jamaica, and a comparison of this list with the changes in the force and accounts of individual camps and gangs shows that, almost without exception, these returning laborers were from the ranks of those that first came to the Isthmus on the opening of the work under the American régime. In other words, nearly all of these laborers have been employed by the Commission over eight months or one year, and, following the practice which obtained during the earlier and later French régimes, all these men returned to their homes for a visit after a long working period, this movement being largely occasioned by the near approach of the holidays.

The statement that these "vast hordes" were returning, owing to dissatisfaction with conditions and treatment on the Isthmus, is without warrant. Within the last week the chief engineer has been advised by cable that large numbers of these laborers are returning to the Isthmus on each steamer of their own volition, after completing their visits and spending the Christmas holidays at their homes. This same state of affairs has obtained ever since the West Indian colored labor has been employed on the canal under every régime and will undoubtedly prevail until a very large proportion of them, if their services are continued, become closely identified with the work by bringing their families to the Isthmus.

Attention is called in Mr. Bigelow's article to the attitude of citizens of Jamaica, as well as to the local government, in the matter of Jamaican laborers going to the Isthmus. It is a fact that the Government in itself does not desire the exportation of these laborers from Jamaica to the canal or elsewhere, owing to the fact that they desire to retain the laborers at home, but the general sentiment of the island is favorable to the employment of these laborers on the canal, owing to the fact that, as expressed by themselves, they can earn and are earning a larger wage with the Isthmian Canal Commission than they can earn anywhere else, and that the money so earned goes back to Jamaica to the financial advantage not only of the families of the laborers, but to all parties.

The statement that the governor of Jamaica, who is personally familiar with labor conditions, etc., is persuaded that the negroes on the Isthmus are not honestly and humanely treated may or may not be so, as the chief engineer is not conversant with his individual opinion. The alleged wish of the governor that some special agent be stationed on the Isthmus to see that the official promises of the United States are respected is considered wholly unnecessary, if true, owing to the presence of the very able British consul at Panama, but is a point to which no objection can be taken.

The negro laborers are provided with quarters, and offered food suitable to their needs and requirements, at terms far superior to anything they have ever experienced. In fact, it is the conviction of

the chief engineer that so much is being done for them as to give them the notion that their services are indispensable, and they are determined to do as little work as possible, for the very high wage they are getting.

Coming to the individual cases of mistreatment or oppression on the part of American judges, or the very indefinite personage indicated as the "white man:" These statements may or may not be true. If they are, they do not possess any value, as they are ex parte statements. Their introduction as testimony seems rather ridiculous. Any number of instances can be adduced on the other side.

Coming now to the matter of the sanitation of Colon: The whole gist of Mr. Bigelow's communication seems to be that the majority of the laborers employed on the canal are living in Colon. As a matter of fact, Colon is entirely outside of the Canal Zone, and of the 10,000 colored inhabitants of which he speaks, probably not more than two or three hundred are in the employ of the Commission. Of this number a part undoubtedly live in Colon, and the balance probably live at or near Cristobal, where proper quarters for the same are under construction, and where the entire white force is now living in good houses, and on Cristobal Point, which is probably as attractive a place of residence as there is in tropical waters.

It is a fact that on arrival at the Isthmus a large proportion, from 50 to 65 per cent, at least, of these colored laborers are infected with malaria; and it is understood that this same condition exists throughout the entire West Indies, and the fact that a certain percentage of them are attacked with malaria and become subjects for the hospitals is not proof that they become infected with malarial parasites after their arrival on the Isthmus. Any statement which is made that the medical department do not promptly, efficiently, and thoroughly care for any of the canal employees, whether white or colored, in their magnificently equipped and efficiently manned hospitals is unqualifiedly false. In my opinion, there can not be a single well-authenticated instance cited where any employee of the Canal Commission has not been given as good medical attention by the Isthmian Canal Commission as can be afforded by any hospital in the world.

Mr. Bigelow speaks of seeing an awning about a quarter of a mile long stretched over a wholly useless gutter in the marshes of Colon. This wholly useless gutter to which he calls attention is a drainage channel which is being constructed by the sanitary department to carry away stagnant water and filth from the dwellings to which Mr. Bigelow calls attention on account of their deplorable condition, and is a channel which is being built for that very purpose (notwithstanding his assertion that no attempt whatever has been made by the canal authorities to provide these various drainage channels). The awning was simply to enable the concrete to set during the heavy rainfall, as explained in the annual report of the chief sanitary officer for October, 1905.

Mr. Bigelow makes mention that close to this awning he saw a monstrous steam dredge stuck in the swamp, etc. Among other details of adopted plans for the sanitation of Colon is the completion of a waterway through which the sea water can ebb and flow through the town, and the "monstrous steam dredge" of which he speaks was a small dredge of the clam-shell type, which has been under construction for sometime past for the purpose of constructing this

very channel. The particular spot of its erection, which Mr. Bigelow criticises, was selected as the best location under the circumstances. The assertion that it is slowly sinking out of sight is, to my personal knowledge, entirely false.

Mr. Bigelow calls attention to the arrival at Colon of a shipload of colored passengers from the French West Indies, and their subsequent mistreatment and their refusal to land, etc. These laborers were from Martinique, and their handling and disposal at Colon on the occasion cited was directed under the instructions and advice of the French consul at that point, and their panicky action was the result of misrepresentation and the application of certain voodoo practices which, as any intelligent person knows, prevail more or less throughout the colored portion of the Tropics. Subsequent to this occurrence the French consul made a thorough personal investigation throughout all the labor gangs and camps of the Isthmian Canal Commission on the Isthmus, and the Canal Commission is in possession of his report, which is very gratifying and flattering to the Commission and which can be inspected at any time. Such evidence, coming from such a source, can not be controverted or thrown lightly aside as the statements of an interested party.

Mr. Bigelow's statement that "a first-class machine man (white) came here ten days ago and was put to work at \$100 gold a month in the Culebra cut," and that "soon afterwards a flabby young man was brought up to him and introduced as his future chief," and that this first-class machine man was told by the engineering chief, whoever he was, that he was expected to instruct his superior can be set down as an absolute falsehood. That such an assertion was ever made by the proper supervising engineer is not to be credited.

It is a fact that many of the so-called first-class men have been discharged, and under the existing administration probably others, when they have thoroughly demonstrated that they are inefficient for the line of work for which they are engaged, will be treated accordingly. The statements of such disgruntled discharged employees must, as of course every sensible man knows, be taken with many grains of allowance, and the statement that this particular first-class man is now working for a private company at double his previous salary would go a long way to explain why he left the employment of the Commission.

The statement in regard to the alleged chat with a well-dressed, intelligent, and energetic negro foreman evidently conveys the idea that these positions of foremen are not open to the colored contingent, that preference is given to any white, worthless tramp, all of which is emphatically denied. The Commission is only too glad to avail itself of the services of the best men, regardless of color, and Mr. Bigelow's statement in this particular regard can not be borne out by the practice of the Commission. While the personnel and grade of many of our foremen is not what is desired, it is best that it has so far been possible to secure, and constant efforts have been and are still being directed toward the betterment of this class of supervision, and selections are made regardless of the color of the skin, all of which Mr. Bigelow could have ascertained if he had cared to look into the entire situation.

In regard to the matter of the construction of the hotel at Corozal, 8 miles from Panama:

This hotel, which was built largely for the use of the clerical force of the Commission at Panama, was located before the present chief engineer was connected with the work. It was located undoubtedly after due consideration and as the result of the best judgment, and the statement that it is located down in a depression of land which became a lake, or rather a vast hog wallow, when it rained is entirely untrue. The hotel itself is built on a rise of ground which slopes from it in all directions, affording good drainage; and while there were some marshes in the vicinity, these have been thoroughly drained, and there is not one particle of evidence that the health of the employees living in this hotel or in dwelling houses immediately adjacent is not as good as anywhere else on the Isthmus. If any doubt is cast upon this statement, the hotel is there and the ground is there to-day, and its topographical conditions have not changed in the least since the construction of the hotel. Furthermore, Mr. Bigelow's statement that it is deserted is absolutely false. Every room is occupied and has been since it was opened.

Mr. Bigelow makes the statement that at Panama an American engineer, representing the most important electric company in America, made the statement that the new dredges in Culebra cut did not do 20 per cent of the work originally promised, etc. As there are no new dredges whatever installed or under contract for use in the Culebra cut, it is difficult to understand what he means, unless he refers to the steam shovels. These shovels, which are now working, as has already been reported, are simply doing preparatory work in placing the cut in proper shape for the installation of necessary tracks and plant, and no effort has been made since August 1 to do any other work, particularly looking toward the excavation of the canal, other than what is necessary for the preliminary work before indicated; and this policy will be pursued until gradually the necessary tracks and plant can be installed, when the proper work of excavating the canal can go forward in a businesslike way. In other words, Mr. Bigelow's statement is false.

Referring to the visit of the great party of "specialists" which came to the Isthmus with Chairman Shonts, in October, 1905, Mr. Bigelow gives a very picturesque account of the visit, and it is supposed he means the visit of the board of consulting engineers. He makes the direct statement that they were met at the wharf by political deputations and a special train. Of these two statements the latter only, in regard to the special train, is correct. That they ran across the 50 miles of railway and back is also correct; but that this train was provided with disinfectants, strong drinks, and mosquito nets is absolutely and unqualifiedly a lie, and the chief engineer arranged personally for this train and knows that there is absolutely no ground whatever for the statement.

The itinerary of the consulting board during their visit to the Isthmus is well known. They were given every facility to examine whatever points of interest they deemed necessary. There being no wagon roads on the Isthmus, it was absolutely necessary for the Panama Railroad, paralleling the line of the proposed canal, to be used as the means of transportation from point to point, which these gentlemen did. They made such examinations as they deemed necessary for their purpose. Personally, the chief engineer took them through what Mr. Bigelow styles "the famous and much exaggerated Culebra

cut" and knows, therefore, that each individual member of this board examined personally and on foot the salient points of interest in the cut, and that the entire day was spent in such examination, and also that several members of this board before their return to the United States made a second visit to the cut and spent many hours in a heavy rain storm in walking over the different points and getting any additional information which they deemed necessary.

They were left perfectly free and unrestricted to make such examination, ask any questions, and obtain any kind of information from all sources that it seemed imperative for them to do, and they were housed on the steamship *Havana*, simply because the Commission had not at that time quarters where this large party could be taken care of as a unit, where they could be furnished with the necessary office accommodations, and where their clerks, stenographers, and staff could carry out the work, and this lack of quarters was due in a very large measure to the fact that the efforts of the Commission had been put forth to provide proper quarters for the care of the laborers, foremen, and superintendents rather than to provide quarters for higher officials.

Regarding the matter of water supply for Colon, this water supply has been found amply sufficient during the rainy season, which ends in December, and for a certain length of time thereafter, by means of storage facilities. Work was somewhat delayed on the permanent pipe line, owing to the nonreceipt of promised material, all of which was received on the isthmus sometime ago. The work is now in progress, and the pipe line has been laid, and the water is now being delivered in Colon. The statement that there is no water supply in Colon is absolutely and unqualifiedly false.

Regarding the sewer system of Panama City, this system, as well as the water supply, street paving, etc., was covered by a treaty between the Panaman Government and the United States. The work has been well designed and is being faithfully executed, and the statement which Mr. Bigelow makes that "our political engineer had put in a single pipe calculated to carry away both human offal and rain water," is not true. The present Chief Engineer has been on the ground daily during the very period covered by Mr. Bigelow's statements. He knows they are absolutely false, and that the water never "backed up into the cellars and ruined many houses;" and such a statement is a pure falsehood.

Mr. Bigelow calls attention to the conditions which obtained before repairs could be made to buildings. No falser statement could be made, as there is no such condition and no such practices prevail. The French left many buildings in a more or less dilapidated condition. Very many of these buildings have been repaired and many more are in process of repair, and the procedure is this: These buildings are repaired in the order of necessity. The superintendent of building construction, who is an old and experienced man in this line of work, first class in every respect, or one of his general foremen, who are men of the same description, makes a personal examination of each structure and reports upon the same and, if possible, an approximate estimate of the cost of such repairs is made to the chief engineer.

If the building is worth repairing the chief engineer immediately, on his own authority, issues orders for such repairs, which the build-

ing department proceeds to carry out at once. The whole process generally does not require more than forty-eight hours. The material, both lumber and hardware, is drawn on simple requisition from the local supply department, and ordinarily little delay has been encountered in furnishing such material. There is no red tape whatever in regard to the matter—it is a simple proposition—and the statement that the "chief engineer may be compelled to hold up for many days a work involving hundreds of men, all drawing their pay for doing nothing," is absolutely false.

With the vast number of men, both gold and silver employees, a proper system of keeping time, making pay rolls and pay-roll vouchers, is an important matter, and a proper scheme for carrying out this proposition has been enforced. Necessarily it has taken some time to educate the clerical force so that rapidity can be achieved. Progress is being made from day to day, and the time of payment and consequent delay in all lines is being cut down from month to month. Payments are now being made with equal rapidity, and in most cases very much quicker than in any part of the world on a work of a similar nature.

The statement that certain medical instruments were purchased in America when they could have been secured at lower prices and more quickly on the Isthmus, may or may not be true, as the chief engineer does not have jurisdiction over this particular branch of the work. As a general proposition, however, it may be stated that purchases are made where they can be made the cheapest with the best guaranteed delivery, and, as the result of years of experience, the writer knows that the service which is being given by the present purchasing department is superior to any with which he has ever been connected or of which he knows.

The statement in regard to the importation of prostitutes is wholly false. No woman known to be of loose character has been imported by the authority, direct or indirect, or with the connivance of the Commission. Every effort has been made and is still being made to induce laborers, officials, and the intermediate grades to bring their wives and families to the Isthmus as fast as the necessary and proper quarters can be provided, and this policy has been pursued with blacks and whites alike. No action has been taken by the Commission or of any of its representatives looking to the introduction of others than those who are the legal wives or families of employees, or as servants in hotels or private families.

In referring to the officials and employees Mr. Bigelow makes the statement that "So-and-so was the protégé of Senator this or Senator that." The chief engineer, in direct charge of the large majority of the white and colored employees on the Isthmus, numbering from ten to twelve thousand, does not know of a single instance of any official or employee holding his position through the influence of a Senator, a Representative in Congress, a Cabinet or executive officer, or an officer of the United States Government, nor is it thought that such an instance can be found. The selection of men to fill these positions has been made almost entirely through the Civil Service Commission, and that they are retained in their separate positions has been, and is still, contingent upon their honesty, efficiency, and adaptability for the places they occupy.

Any intimation that such places or any places are filled through what is called "graft," political or personal, is most emphatically false and does not obtain in a single case, and, as far as is known and believed by the chief engineer, the same situation exists regarding all departments of the Isthmian Canal Commission on the Isthmus. Mr. Bigelow's statement is unqualifiedly false. The chief engineer has made discharges repeatedly, and no hint has ever come to him as to any man being retained for political favoritism. Mr. Bigelow's statements have been very largely, if not wholly, based on ex parte evidence, taken from two sources, one of which has been dwelt upon and its thorough unreliability shown. The second source is one in which the person involved undoubtedly has a personal grievance, owing to the peculiar claims which he has made for official appointment at several times. He has been refused such appointment because of his personal and moral shortcomings.

Mr. Bigelow quotes Chairman Shonts as saying, in his speech in Washington on November 9, "if sickness could ever be regarded as a boon it may be thought so in Colon." Mr. Shonts, in the speech above referred to, quoted Mr. Isham Randolph, one of the members of the consulting board of engineers, as follows:

The hospitals are a source of just pride to our people. If sickness could ever be regarded as a boon it may be so thought in Ancon and Colon.

Mr. Bigelow is very unfortunate in his misquotations, following his usual practice of insincerity and perversion of the truth. In his quotation from Mr. Randolph's statement, Mr. Shonts simply confirms what every fair-minded person who has investigated the situation knows, and which the testimony of hundreds of patients who have been treated at the isthmian canal hospitals at Ancon and Colon bears out, that nowhere, not even in their own homes, could they have been given better and kinder treatment; and the direct intimation that Chairman Shonts's quotation should be regarded in the light of a cruel joke is totally unworthy of any human being who calls himself a gentleman.

The work of the Isthmian Canal Commission at the present time, as it should be at all times, is open to just criticism, and to the inspection of any fair-minded body of men. It has nothing hidden. Its records are accessible. The work which it has done and is doing, and the personnel of its employees, of all grades, is open to the world. The several departments have nothing to excuse and nothing to conceal; and the progress of the work, while, of course, not wholly satisfactory to those responsible for it, is such as to convince all wellwishers of the enterprise that it will be successfully carried out.

Of all the difficulties which are encountered there are none more serious than the constant and apparently systematic misrepresentations and falsehoods which emanate from parties who, from some motive, are desirous of proving to the world that they are willing to stand forth as self-confessed falsifiers whose moral perceptions have somehow become warped to the extent that they are capable neither of receiving and digesting fair-minded testimony nor of telling the truth.

JNO. F. STEVENS,
Chief Engineer.

EXHIBIT B.

[Excerpt from The Panama Daily Star and Herald December 3, 1905.]

Mr. Poultney Bigelow, distinguished author, lecturer, and traveler, arrived from Southampton by the Royal Mail steamer *Trent* on November 29 and left Colon by the same steamer December 1 for Jamaica and New York. Mr. Bigelow came to the city of Panama and returned to Colon on the same day. He took great interest in the condition of Colon, and expresses astonishment that so little had been done by the American administration to improve that sorry-looking appurtenance to the "Gateway of the universe."

EXHIBIT C.

[John Lundle, consulting engineer, 52 Broadway, New York City.]

PANAMA, November 15, 1905.

MY DEAR SIR: This letter, if you please, is not an official one to the President, but a private communication to Theodore Roosevelt, the man, whom every honest citizen must admire and honor for his sterling personal qualities.

In my whole experience as an engineer and a business man (I am exactly your own age) I have never seen such a piece of mismanagement and utter demoralization as exists to-day on the Isthmus of Panama. The United States ought to hang its head in shame at the way in which prodigality, incompetence, insolence, unfair dealing (not to say graft, which is always hard to actually prove), and cowardice permeate the organization of the Canal Commission.

The fault is not with the rank and file; there are many honest, competent men here. There is, however, every facility for them to become dishonest and incompetent from laxity in organization.

Please allow me to be very frank, even in criticising those in high places, as their influence seems to permeate the whole organization and makes ridiculous men of the highest integrity or business and professional reputation who happen to come under their influence or supervision.

I understand Secretary Taft arrived on the Isthmus on November 2 and left on the 7th. What was talked over in Panama Government circles and with the executive officers of the Commission it would be impertinence of me to discuss. I asked the gentleman for a conference in person and wrote him a letter, to which I received a reply, a copy of which is inclosed with a business communication addressed to you. The reply is a simple turning off of the question involved—a "Go away, little boy," response. As to a conference, he said he was so busy that he had not a minute to spare. Incidentally, he had time for a great deal of social entertainment, which perhaps, for aught I know, fulfilled the diplomatic object of his visit. He attended, for instance, receptions and balls (yes! he danced, to the intense amusement of the tittering girls of Panama) on Friday, November 3, and Sunday, November 5, in Panama, and on Monday, November 6, in Colon. Nero fiddled while Rome burned.

The members of the Commission and the advisory board arrived at Colon on Wednesday, October 4. Their itinerary was as follows:

Wednesday, October 4.—Special train from Colon to La Boca and return, avoiding the pest-ridden (ha!) city of Panama—all dressed like guys, with white helmets—for ostensibly the purpose of getting a general view of the country.

Thursday, October 5.—Visited site of proposed dam at Bohio on train. There is the best of authority for stating that only one of the party walked as far as the water's edge.

Friday, October 6.—Visited site of proposed dam at Gamboa.

Saturday, October 7.—Visited Culebra cut. Some of the party actually refused to walk through the cut.

Sunday, October 8.—Day of rest!

Monday, October 9.—Visited city of Panama for a few hours and paid respects to President Amador.

Tuesday, October 10.—Received canal officers at Colon.

Wednesday, October 11.—The cowards sailed away.

The foregoing refers to the advisory board. The Commission no doubt met in solemn deliberation behind mosquito screens.

During their stay they lived aboard the steamship *Havana*. They did not dare take trips which would necessitate remaining away from their fan-cooled rooms over night. Not a member of the board of engineers, I understand, went to Alhajuela. One Congressional Representative had the nerve, I believe, to make the trip.

Their actions are beyond comprehension. All honorable professional (save the mark for some) gentlemen. They might as well have stayed at home and studied the data furnished in book form, except for the fact that, to their mental vision, they have now some idea of the country to which the data refers. They were certainly induced by some one, or by reports, to act like a lot of scared cats. Personally I saw none of them, but the descriptions of the cowardice displayed are screamingly funny. I am sure any ordinary business man in Congress would be able to knock their "academic" report into a cocked hat, if their visit to the Isthmus is the basis of their conclusions. It looks as though this idiotic yellow-fever bugaboo is being used to advantage by some one.

There is a coarse, incompetent, unprincipled jackass by the name of Shonts, who, under the Secretary of War, seems to dictate the physical and moral tone of what is done on the Isthmus, and the result is pitiful in the extreme. The United States will, under such influence, become the laughing stock and stink in the nostrils of the whole world. His appointees are of varied stripe, but mostly take after their patron. High salaries do not, of necessity, make big men out of incompetent weaklings (or worse).

Governor Magoon seems to stand the light of criticism well, appearing to be a man of suavity and integrity. He, however, seems to wish to please the "man higher up," to the distortion of his better sense of right and justice.

Under the present régime the canal project will become, assuredly, a seething mass of corruption.

Please take this letter as a confidential communication for your own use. I have no public charges to make, nor is my aim in writing to you to seek any public preferment. My experience in seeking an appointment on the advisory board of engineers was my first, and it will be my last effort to seek public office. Men of my stamp are evidently not wanted. I propose to stand or fall on my personal merits, sticking to private business, but will endeavor to hit a head, when I see it, of a corrupt or incompetent public official.

Assuredly, sir, it would seem as though the day of the upright,

fearless, competent man is giving way to a reign of cupidity and utter lack of moral sense.

The man in the White House is beyond reproach. Why such lieutenants?

It is trusted that you will even stand alone, if necessary, in fighting for the honor of the United States. You will not, however, have to do so, as there is enough of the sterling stuff left of which our forefathers were made to support you in sweeping miserable time-servers into oblivion, so far as such lies in your power.

Yours, most sincerely,

JOHN LUNDIE.

HON. THEODORE ROOSEVELT,
Washington, D. C.

[Panama-American Corporation, New York office, 17 Battery place.]

PANAMA, November 15, 1905.

DEAR SIR: Inclosed please find copy of correspondence relating to Panama matters, which might be of interest to you. It is only sent for your information and not as an appeal for any action (past or anticipated) of the Canal Commission.

Respectfully,

JOHN LUNDIE,
Vice-President and General Manager.

HON. THEODORE ROOSEVELT,
President of the United States, Washington, D. C.

[Panama-American Corporation, New York office, 17 Battery place.]

(Copy.)

PANAMA, November 3, 1905.

DEAR MR. SECRETARY: The Panama-American Corporation is incorporated under the laws of New Jersey and duly registered in Panama. The interests represented in the corporation are as follows:

New York interests: William Nelson Cromwell, 22.5 per cent; other New York stockholders, 7.5 per cent; total New York interests, 30 per cent.

New York and Panama joint interests: Brandon Brothers, 14.5 per cent; total joint interests, 14.5 per cent.

Panama interests: Ricardo Arias, 9.5 per cent; Manuel Espinosa, 9.5 per cent; J. G. Duque, 9.5 per cent; other Panama stockholders, 27 per cent; total Panama interests, 55.5 per cent. Total, 100 per cent.

Inclosed please find a clipping from the Panama Star and Herald of the 31st ultimo, which contains the substance of an interview with the writer on the subject of rates and schedules for supplying ice and electric lighting by this corporation.

In view of the fact that we have expended about \$250,000 gold in the construction of a thoroughly modern plant for turning our ice and electric current, we respectfully ask that the United States Government refrain from undermining our business by allowing the proposed commissary to sell ice or electricity at less than our cost, while, at the same time, the corporation is absolutely at the mercy of the United States as to its fuel supply.

We ask no special favors, but appeal to your sense of justice not to allow this corporation to be crushed out of existence by any misunderstanding regarding our methods of conducting business. We should be pleased to place our books

at the disposal of any expert accountant you might send, to verify the statement that the corporation is only seeking an ordinary legitimate business profit, and has been established to meet the urgent needs of Panama.

We are sure you have only to look into this matter in order to see at once the justice of this appeal.

We further ask if it would not be simple fairness to the corporation (which, as you see, is composed of citizens of Panama and the United States) to negotiate with us for the supply of the commodities which we produce to the Canal Zone, instead of the United States building temporary refrigerating plants and electric-generating stations, which will glut the market and kill our legitimate business. We are ready to supply all present needs of the Isthmus and will extend to meet requirements in any way consistent with business management. Our prices will meet any legitimate competition.

Surely the American Government will protect its own citizens' trade interests and those of the citizens of Panama, who are virtually under its protectorate, provided such trade is carried on along equitable lines, which ours is.

Very truly, yours,

JOHN LUNDIE,
Vice-President and General Manager.

Hon. WM. H. TAFT,
Secretary of War, United States of America, Panama.

[Excerpt from Star and Herald, Tuesday, October 31, 1905.]

A reporter from the Star and Herald called on Dr. John Lundie, vice-president and general manager of the Panama-American Corporation, yesterday, for the purpose of obtaining some information as to the prices to be established for electric lighting and ice, now that the new plant is in operation. Doctor Lundie expressed himself as willing to answer any questions on the subject which were consistent with his duty as executive officer of the corporation.

"What price do you propose to charge for ice?" was the first interrogation. "That depends on the quantity bought. If we have to handle and weigh ice in small quantities we must charge for shrinkage and for the incidental expense of such retailing. If, on the other hand, we deliver ice at our plant in large quantity, we can afford to make much lower prices on the same. Our base price on 100-pound lots and over for the present will be 3 cents silver per pound. When ice is taken in large quantities we will make discounts commensurate with the amount taken."

"We understand that the Panama Railroad Company supplies ice to its employees at a price comparing favorably with what ice can be obtained for in the United States. Why can you not make the same price to the public?"

Doctor Lundie smiled and said:

"The best answer I can make to that question is that the cost of manufacture of ice is dependent first on certain fixed charges, salaries, etc., after which it is practically a question of so much coal, so much ice. If we could secure coal at \$2 per ton, as in the States, you can readily see that we could turn out ice as cheaply, so far as fuel is concerned, as there. When, however, we have to pay several times that price for coal, our product must cost just so much more to turn out. Ice can be turned out cheaper in Colon than here on account of coal being cheaper at that point."

"Why, then, do you not manufacture your ice in Colon and ship it over to Panama?"

"Because the shrinkage and freight more than counterbalance the difference in price of coal."

"Seeing that the Panama Railroad Company controls the price of coal in Panama, and also the tariff on ice, and at the same time supplies ice to its employees at a less price than you can afford to do so, why do you not make an appeal to the United States Government, which operates the railroad, asking that it refrain from discriminating against you in its own favor?"

Doctor Lundie laughed outright at this question, and answered, "I have no desire to start a quarrel with the United States Government by criticising its policy. Besides, they are not discriminating against us, inasmuch as they only supply ice to their own employees, which they may do for nothing if they so choose. When they enter the commercial field it will be time enough to make an appeal for justice."

"What do you actually pay for coal from the railroad company?"

"I can not answer that question, as I recognize the fact that the railroad company is under no legal obligation to sell coal to us. We have received courteous consideration from General Manager Stevens in the matter of coal supply. We know he has made us the best price he consistently can at present, and we must consequently base our prices for ice and electric light in accordance therewith."

"Do you intend to continue the retailing of ice, or do you propose to encourage other parties besides yourselves to retail ice?"

"Parties buying our ice in large quantities can do as they please with it. We shall preserve a retail department for convenience and also for the purpose of preventing excessive charges on the part of other retailers."

"What capacity for ice storage have you?"

"We can easily store 200 tons."

"Have you any cold-storage capacity in addition to your ice-storage room?"

"We have two large cold-storage rooms. One will be kept at a temperature of 20° for the storage of frozen produce, and the other will have a temperature of 34° for liquids and other produce which must be kept just above the freezing point."

ELECTRIC LIGHTING.

"It is the purpose of the corporation to reduce the price of lighting from the present price of \$4 silver per month for each incandescent lamp?"

"In response to that question, here is our proposed schedule of charges for incandescent lighting:

"Two dollars per lamp per month for an average of one and a half hours' service in each twenty-four hours; 2,500 watt hours per month, not cumulative.

"Two dollars and fifty cents per lamp per month for an average of three hours' service in each twenty-four hours, 5,000 watt hours per month, not cumulative.

"Three dollars per lamp per month for an average of four and a half hours' service in each twenty-four hours, 7,500 watt hours per month, not cumulative.

"Three dollars and fifty cents per lamp per month for an average of six hours' service in each twenty-four hours, 10,000 watt hours per month, not cumulative. Extra current up to 100,000 watt hours per month, 35 cents per 1,000 watt hours. Current from 100,000 to 200,000 watt hours per month, 33 cents per 1,000 watt hours.

"Consumers using over 200,000 watt hours per month will be placed wholly on a meter basis of 30 cents, net, per 1,000 watt hours. Minimum payment, \$60 per month.

"Arc lights will be considered as the equivalent of ten 16-candlepower incandescents. Special rates will be made for incidental or occasional lighting.

"All prices are quoted in silver currency. In making comparisons with lighting elsewhere it will, of course, be remembered that the rates in United States currency are half of the above."

"How do these rates compare with those in vogue in New York City?"

"The base rate in New York City used to be 20 cents gold per 1,000 watt hours. It is now 15 cents, or exactly the same as our charge to consumers who use over 200,000 watt hours per month."

"How can you afford to make such prices on lighting, in view of what you have just said in reference to the cost of your products being dependent on the price of coal? Is it not true that the cost of production of electricity is just as dependent on the price of coal as the cost of production of ice?"

"It is perfectly true that the cost of production of electricity is just as dependent on the price of coal as is the cost of the production of ice. The reason why we are able to place prices at the figures named is because we assure ourselves of a minimum payment from each consumer while our rates are such as to encourage the use of electricity to an extent which will permit of economical operation of our generators."

"How can you tell how many hours a consumer uses his lights?"

"It is not a question with us of how long a consumer uses his lights, but simply a matter of reading from a meter how many watt hours he consumes in a month. Every installation will be metered."

"May a consumer switch his lights from one place to another?"

"We have made a rule that half of the lights in any installation may have switches. For instance, a consumer contracting for ten lights of any grade or grades may have an installation of 15 lamps, five of them being switched from five of the ten contracted for."

"Is it your intention to supply current in the daytime?"

"Yes. A consumer may use his quota of current in any way and at any time he sees fit. If he wishes to run an electric fan he may do so."

"How much current is required for the operation of a 12-inch fan?"

"About the equivalent of from one and a half to two lamps."

"Are you prepared to make interior installations?"

"We intend to keep a full stock of material on hand for such work, but we do not wish to monopolize it. We will not bid on doing this work, but will undertake it at cost plus a reasonable profit on a prospective consumer indicating generally what he wishes done. The corporation will assume no insurance risk on any interior work performed by its employees."

"Are you prepared to supply current suitable for the operation of motors driving machinery?"

"Yes. Our three-phase current is specially suited for such operation. Motor operation is exceedingly economical, as no special knowledge is required on the part of the user. All that is necessary is to throw a switch and the motor starts."

"When do you intend to put your new rates in effect?"

"As soon as our meters arrive. They were ordered a month ago."

"Would it not be possible to put the new rates in effect immediately and trust to the honor of consumers on a lamp-hour basis?"

"Perhaps. It would be unfortunate, however, to start operating on such a basis and find consumers careless enough to keep their lamps burning all day long, not to mention the using of fans in the consumption of current far beyond that to which they would be entitled."

"Do you expect to supply current to the Canal Commission?"

"Ah! That is a conundrum. We are willing and ready to do business with them and, as you have seen, our rates are attractive."

"Could you carry your current as far as Culebra?"

"Yes, without the slightest difficulty."

"How long do you expect to remain on the Isthmus?" said the reporter as he arose to go.

"I hope to remain until after the celebration in the beginning of November," said Doctor Lundie, "but after I leave the good work will go on under the guidance of Mr. Joshua Piza, our local manager, and that of our treasurer, Mr. Ricardo Arias, assisted by a corps of competent employees."

(Copy.)

ANCON, CANAL ZONE, November 5, 1905.

MY DEAR SIR: I am in receipt of your letter of November 3, in which you advise me of the incorporation of the Panama-American Corporation and state the personnel of the stockholders of the corporation. You ask the United States Government to refrain from undermining your business by allowing the proposed commissary to sell ice or electricity at less than your cost, while at the same time the corporation is absolutely at the mercy of the United States as to its fuel supply.

This matter is in the hands of the Commission, who are in no way disposed to destroy a legitimate business, entered upon, as yours seems to be, with sufficient capital; but you must of course know that in an enterprise like the one of building the canal and providing house accommodation and food for possibly 20,000 or 25,000 people along a line of railway 47 miles in length, the Government can not permit itself to rely on a private corporation and surrender to it the monopoly of furnishing electricity or ice. On the other hand, the business which the United States expects to use its refrigerating plant and electrical plant for is solely Government business, and it will furnish what it has to furnish at reasonable rates, taking into consideration all the elements of cost. It has no desire to drive you out of business or to interfere with your legitimate profit. That I know is the attitude of the Commission, for I have talked with Governor Magoon on the subject, and I think you may certainly rely on the justice of Mr. Stevens and Governor Magoon, who are in local control.

Very sincerely, yours,

WM. H. TAFT.

Dr. JOHN LUNDIE,
Vice-President and General Manager
Panama-American Corporation, Panama.

NOVEMBER 14, 1905.

GENTLEMEN: Inclosed please find copy of correspondence which this corporation has had with Secretary Taft.

The Secretary writes that the matter alluded to is in the hands of the Commission, and refers to Governor Magoon and Mr. Stevens as being in local control. In view of this communication, this letter is addressed through these gentlemen to your honorable body representing the United States Government.

The Secretary is acting under a misapprehension in judging that we seek a monopoly in the furnishing of electricity or ice. We simply ask for an opportunity (which we understand is the privilege of any responsible citizen) to tender for the supply of these commodities, we having the facilities for supplying them from a thoroughly equipped modern plant at a cost that would be less than the cost of production from any plant not operated on the strictest economical lines.

There are at present three concerns on the Isthmus which manufacture electricity and ice—The Panama Railroad Company, having a nominal capacity of 5 tons of ice per day; the Colon Electric and Ice Supply Company, having a nominal capacity of 10 tons of ice per day; The Pan-American Corporation, having a nominal capacity of 20 tons of ice per day. Total nominal capacity, 35 tons of ice per day.

That the Isthmus is well supplied with refrigerating apparatus now is evident from the consumption of that article, not more than an average of 12 tons of ice daily being used from all three plants, which together, as above stated, have a nominal capacity of 35 tons and an overload capacity of an easy 50 tons per day.

Apart from the supply of ice to ships, you can readily judge of what might be the required ice supply. Say there are 200 hotels, boarding houses, or ice-using families in the city of Panama, 200 along the line, and 100 at Colon, making 500 parties taking ice daily, at, say, the rate of 50 pounds each. This would call for 25,000 pounds of ice per day, or 12½ tons. That this is an ample estimate you may judge from the fact that the Ancon hospitals only take 1½ tons daily, while the Grand Central Hotel, with the largest bar in the city of Panama, consumes less than one-fourth ton daily.

The number of white people on the Isthmus (who will be the principal ice consumers) will probably not be doubled under the most strenuous canal operation. Seeing, then, the present capacity for turning out ice on the Isthmus is four times the present demand, we respectfully ask that the United States Government desist from introducing additional refrigerating plants.

We are not in a position to say what the other concerns who manufacture ice may tender for their supply. We can, however, say, as stated in our letter to the Secretary, that we should be pleased to place our books at the disposal of any expert accountant you might send to verify our statement that the corporation is only seeking an ordinary legitimate profit. If the United States Government is unwilling to allow any profit to be made on articles for the consumption of its employees, we will even go to the length of formally tendering to deliver ice or refrigeration at cost, in order to prevent the inevitable glut in the market which will assuredly take place if the proposed refrigerating plants are built and operated.

Surely the United States Government or its accredited representatives will not act the part of oppressors of the legitimate commerce of its own citizens. Our attitude at the present writing is that of humbly asking the Government, which we have been partly instrumental in creating, the privilege of being allowed to live.

Exactly the same arguments apply to the supply of electricity as have been presented regarding refrigeration. We are now prepared to supply the same, anywhere along the line of the canal, at rates as low as in New York City, even although our fuel is very expensive and is made so principally by the United States Government.

The writer believes that this appeal will be sufficient to prompt action on the part of your honorable body without it becoming necessary to make a plea for protection to the President of the United States or to Congress.

Respectfully submitted.

Vice-President and General Manager.

(Copy to President Roosevelt—not as an appeal, but for his information.)

ISTHMIAN CANAL COMMISSION,
Panama.

[Isthmian Canal Affairs, Office of Administration, Panama Canal Building.]

WASHINGTON, D. C., December 5, 1905.

SIR: I have the honor to acknowledge the receipt of your letter of November 14, transmitting correspondence between your corporation and Secretary Taft relative to the furnishing of ice and electricity to officials and employees of the Panama Canal, and in which you protest against the creation of facilities for this purpose on behalf of the Government.

The position of the Commission is well expressed in the following extract taken from the letter of Secretary Taft to you, dated November 5:

"You ask the United States Government to refrain from undermining your business by allowing the proposed commissary to sell ice or electricity at less than your cost, while at the same time the corporation is absolutely at the mercy of the United States as to its fuel supply.

"This matter is in the hands of the Commission, who are in no way disposed to destroy a legitimate business, entered upon, as yours seems to be, with sufficient capital; but you must of course know that in an enterprise like the one of building the canal and providing house accommodation and food for possibly twenty or twenty-five thousand people along a line of railway 47 miles in length, the Government can not permit itself to rely on a private corporation and surrender to it the monopoly of furnishing electricity or ice. On the other hand, the business which the United States expects to use its refrigerating plant and electrical plant for is solely Government business, and it will furnish what it has to furnish at reasonable rates, taking into consideration all the elements of cost. It has no desire to drive you out of business or to interfere with your legitimate profit."

The present plan of the Commission contemplates the establishment of a line of refrigeration from the markets of the United States to all points along the line of work. This involves the creation of refrigerating facilities on board the steamers and of refrigerator cars along the line of the Panama Railroad. The establishment of a cold-storage plant at Colon is a necessary instrumentality for the transfer of perishables from the steamers to the refrigerator cars.

Aside from providing cold-storage facilities, it is expected that this plant will manufacture ice sufficient for the icing of the cars on the railroad and to supply the legitimate needs of the Commission's hospitals and mess hotels. If the facilities permit, after these wants have been met, it is contemplated that all bona fide employees will be accorded the privilege of purchasing at a nominal price.

In a work of this magnitude it is not believed that the Government should be dependent upon private corporations for cold-storage space or for ice. It must be in a position itself to control and assure itself of the output.

In so far as the element of cost is concerned, I am advised that your present price for ice delivered at Ancon Hospital is \$1 per hundred.

The establishment of a line of refrigeration involving the creation of cold-storage and ice-making facilities on the Isthmus is merely an improvement of the transportation facilities of the Panama Railroad and as such can not be sublet to any individual or corporation.

Very respectfully,

T. P. SHONTS, *Chairman.*

DR. JOHN LUNDIE,
*Vice-President and General Manager Panama-American Corporation,
Panama.*

(Copy to Governor Magoon, December 1, 1905.)

EXHIBIT D.

[Translation of cablegram received from Panama.]

NOVEMBER 16, 1905.

SHONTS, *Isthmian, Washington:*

Rumored here that many of the 150 women recently arrived on ship from Martinique and represented as employees' wives are not married and have been brought here and distributed among men by our officials for immoral purposes. First knowledge of their arrival and this rumor reached me November 14; immediately brought to Stevens's attention in writing, and instructed chief of the Zone police to make quiet investigation and ascertain the facts. Also requested the municipalities, where such ordinances do not exist, to enact ordinance prohibiting lewdness. Confer with Jackson Smith, chief of branch of labor and quarters, engineering department, sole charge of the work of bringing in and disposing of common laborers. He is in Washington, D. C.; ascertain the facts from him and confer with Secretary of War.

This matter involves Zone government, as that government is charged with protecting public morals. Heard this morning that sensational article was mailed New York Herald to-day.

MAGOON.

[Isthmian Canal Zone, executive office.]

ANCON, *November 16, 1905.*

SIR: I have the honor to bring to your attention copy of a letter dated November 14, addressed to Chief Engineer Stevens, copy of order issued November 16 to the chief of the Zone police, and copy of cablegram this day sent to Chairman Shonts with reference to the rumor that 150 Martinique women have been brought to the Zone and distributed among our employees for immoral purposes.

It is no doubt true that private contractors find it advisable, if not necessary, to supply their common laborers with women, and quite possible, if the practice is not permitted in the Zone, that it may affect the question of labor supply from the West Indies or elsewhere.

In this situation I would like to be advised what, if any, action I am to take should it be established that the rumors referred to have some basis of fact.

Very respectfully,

CHARLES E. MAGOON,
Governor.

The honorable the SECRETARY OF WAR,
Washington, D. C.

ANCON, November 14, 1905.

SIR: A rumor comes to me that 150 women from the island of Martinique have been brought to the Zone by the division of labor and quarters of the department of construction and engineering, and permitted to disperse among the laborers engaged in canal construction work, and are now living with the men as concubines. I sincerely hope and believe that the rumor is not true. Although not advised of their coming, I heard that there had arrived on the Isthmus about 150 women, who were the wives and families of laborers who were brought from Martinique. This was gratifying intelligence, as it seemed to show that the men were satisfied with conditions here. There is no reasonable objection to women coming here for employment as servants, laundresses, boarding-house keepers, etc., but that is very different from bringing in women for immoral purposes.

I have heard that railroad companies and other private concerns in the United States and elsewhere, employing large bodies of common laborers brought from foreign countries, sometimes resort to the practice of importing women from the same countries for the use of the men. Such a practice indulged in by the Government of the United States or any of its agencies would shock the public mind and be so repugnant to our citizens that it would seriously embarrass not only the agency but also the administration responsible for the acts of that agency.

If there is any ground for believing that the women referred to, or any part of them, were brought to the Zone, or came voluntarily, for the purpose suggested they should be gathered up and returned to Martinique without regard to the effect upon the several hundred workmen from the island now employed on the construction work.

As already stated, I hope there is no basis of truth for this scandalous rumor, and shall be glad to learn the facts, if you know them, or to be assured that neither the Commission nor the Panama Railroad Company is involved in the matter.

Yours, very truly,

CHARLES E. MAGOON, *Governor.*

MR. JOHN F. STEVENS,
Chief Engineer, Ancon.

ANCON, November 16, 1905.

SIR: It has come to my knowledge that a rumor is in circulation that within the past few days about 150 women from the island of Martinique arrived at Colon, a port of the Republic of Panama, and from there dispersed to several localities within the Zone where workmen from Martinique are stationed. and also that in numerous instances women who came in said party are living and cohabiting with men who are not their husbands.

I am confident that a majority of these women were married and came to the Isthmus for the purpose of living with their husbands. I know it is generally believed that in many of the West Indies a great many men and women live together without being married, and it would be difficult to prevent such immoral conduct along the line of

the canal, for it will be difficult to secure admissions of wrongful and illegal action, especially among people who do not consider such conduct as being reprehensible, and it will, of course, be impossible for us to prove that a man and woman living together and claiming to be husband and wife are not husband and wife.

It is, however, incumbent upon us to ascertain the facts in this matter, and I wish you would make a systematic investigation with reference to the women referred to above. The investigation should be conducted quietly in order not to induce scandal or unnecessarily offend innocent parties, yet must be sufficiently thorough to develop the truth.

You will make such investigation and report the facts to me in writing as early as the exigencies of the public service and the limited means at your command permit.

Yours, very truly,

CHARLES E. MAGOON, *Governor.*

Capt. GEO. R. SHANTON,
Chief of Police, Ancon.

[Translation of cablegram received from Panama.]

NOVEMBER 20, 1905.

ISTHMIAN, *Washington.*

SHORTS: Letter from Stevens to me respecting Martinique women says:

"These women consist largely of the wives of laborers who had preceded them, coming to our work, and were sent here on the request of their husbands, some coming to fill positions as servants in white families and some as laundresses and chambermaids, for which there was a demand; and all were brought with only the above objects in view, precisely as white women have come from the States under similar conditions to join their husbands and as nurses, etc. Nearly every one of these families was known personally to our representative in Martinique, and care was taken to include only those who came for legitimate purposes, and to my belief the selection was justified by the results.

"You can hear any sort of a rumor on the Isthmus, and the one you referred to is entitled to just as much credence as any of them—none at all. At the same time it must be borne in mind that the situation as regards social and family relations among the island blacks differs entirely from that which obtains among white people generally. Thousands of men and women in these islands live together their lives long and never go through the marriage ceremony, but they are recognized as man and wife, and all their family relations are based upon the above arrangement. In fact, the proportion of illegitimate children (illegitimate according to our standard) in some of the largest and most populous islands is 80 per cent. Still, the families so constituted form the unit of the social and political life of the islands, and from their point of view, from which it is entirely proper to judge them, are entitled to just as much respect as our people who happen to be born and live in another country and under different conditions.

ISTHMIAN CANAL.

"You can absolutely and unqualifiedly deny any other purpose in bringing these women to the Isthmus excepting an absolutely legitimate and honest one. Our effort is to establish our blacks as well as whites in old home relations, so that a feeling of stability and contentment with consequent better work will result."

MAGOON.

NOVEMBER 25, 1905.

MY DEAR SIR: I am in receipt of your letter of November 16, inclosing a copy of a letter of November 14, addressed to Chief Engineer Stevens, a copy of an order issued November 16 to the chief of the Zone police, and a copy of a cablegram sent to Chairman Shonts, with reference to the rumor that 150 Martinique women have been brought to the Zone and distributed among the employees for immoral purposes.

I have read your letters, and entirely concur in the policy favored by you in your letter to Engineer Stevens.

Very respectfully,

WM. H. TAFT, *Secretary of War.*

HON. CHARLES E. MAGOON,
Governor of the Canal Zone, Ancon, Panama.

[Isthmian Canal Zone, Executive Office.]

ANCON, November 22, 1905.

MY DEAR SHONTS: Referring to my letter to you of November 16, relative to the Martinique women who recently arrived on the Isthmus, and to my several cables on the same subject, I inclose herewith a copy of the report of the chief of police, dated November 21, made in compliance with my instructions of November 16.

Very sincerely,

CHARLES E. MAGOON, *Governor.*
H. D. R.

HON. THEODORE P. SHONTS,
Chairman Isthmian Canal Commission,
Washington, D. C.

[Isthmian Canal Zone, Headquarters Police Department.]

ANCON, November 21, 1905.

HON. CHAS. E. MAGOON,
Governor Canal Zone, Ancon.

SIR: Referring to your letter of recent date, relative to the women who arrived in Colon from Martinique October 30, 1905, I have the honor to report as follows:

A great many of these women have relatives working on the Canal Zone, and most of the balance are working at the various hotels along the line, are employed as domestics in the families of employees of the Isthmian Canal Commission, or are living with some one man exclusively. The balance find employment as laundresses.

As a class, these women are neat, clean, and industrious, and the records of this department show that none of them have been arrested for any cause whatever. Of the entire number which have arrived on the Canal Zone not more than three or four are common prostitutes.

Approximately these women are distributed along the line and are employed as follows:

Station.	Married, living with husband.	Single, working for private families.	Working for Isth- mian Com- mission hotels.	Single, not em- ployed.	Living with men not married.	Laun- dresses.	Total.
Corozal.....		7	9			24	40
Pedro Miguel.....	6	1	20				27
Paraiso.....	1	1	2	10	11		25
Cucaracha.....	5				23		28
Culebra.....	11	13	14				38
Las Cascadas.....	4	7					11
Bas Obispo.....	18	2					20
Metachin.....	6						6
Gorgona.....	2	5	8				15
Lirio.....	25						25
Cirio.....	20						20
Cuneta.....	4				17		21
Chagres.....	24						24
Total.....	126	36	48	10	51	24	295

In conclusion I wish to say that I think bringing these women in is a move in the right direction, as it tends to make the men more contented, and their presence causes the laborers to be more orderly and industrious than formerly.

Very respectfully,

GEORGE R. SHANTON.

HON. CHARLES E. MAGOON,
Governor Canal Zone, Ancon.

DECEMBER 14, 1905.

MY DEAR SENATOR: In response to your telephone communication to which I replied authorizing you to deny the statement that the 150 Martinique women were brought in ships of the Canal Commission from Martinique to Panama for prostitution purposes, I beg to submit the correspondence that the Commission and I myself have had with Governor Magoon on this subject.

Very sincerely, yours,

WM. H. TAFT.

HON. H. C. LODGE,
United States Senate.

DECEMBER 16, 1905.

MY DEAR SENATOR: Referring to the subject of your telephone message of yesterday, in which you said that it had been stated on the floor of the Senate "that a cargo of women had been brought to Colon, under the authority of the Commission, to be distributed up and down among the laborers on the Isthmus for immoral purposes," I beg to say that my answer to you that the statement was false was founded on information received in letters written me by Judge

Magoon. Subsequently I had the correspondence of Judge Magoon with the Commission examined, and all the papers found relevant to the matter have been sent to you. The records of the Commission have this morning been searched, and the vouchers accompanying the accounts of labor agents examined by Mr. Pepperman, the assistant chief of the Washington office of the Canal Commission.

These records show that the labor agents of the Commission had no authority conferred on them except to pay for the transportation of laborers, and the vouchers show no payments except for the transportation of laborers. I have also conferred with Mr. Shonts and Colonel Ernst, of the Commission. I find also that Mr. Jackson Smith, the chief of the bureau of labor and quarters on the Isthmus, in charge of the importation of laborers, who happened to be in Washington at the time, was interrogated in respect to the matter when the first dispatch from Judge Magoon came. The correspondence that I have sent you speaks for itself. After this investigation I am able to reiterate my statement to you over the telephone, "that the charge that a cargo of women was brought to Colon on a vessel of the Commission, or under their authority, or with their encouragement, to be distributed up and down among the laborers of the Isthmus for immoral purposes," is unqualifiedly false.

I may say generally that the Commission has been exceedingly solicitous concerning the conditions as to morality and decent living of those whom they are gathering into settlements along the line of the canal on the Isthmus. They are furnishing schools, and they have now in their pay six or seven pastors of the different churches to which the laborers belong, including the Roman Catholic Church, the Methodist Church, the Baptist Church, the Protestant Episcopal Church, the Presbyterian Church, and the Salvation Army. Eight buildings have already been assigned for religious purposes, and as soon as the buildings now under construction for school purposes are completed they are to be devoted to religious purposes on Sunday. I venture to say that there are no more law-abiding and orderly communities assembled under analogous circumstances anywhere than in the villages and towns situate along the line of the canal and the railway upon the Isthmus.

Very sincerely, yours,

WM. H. TAFT.

Hon. H. C. LODGE,
United States Senate.

ISTHMIAN CANAL COMMISSION,
Washington, D. C., December 18, 1905.

MY DEAR SENATOR: I observe in the Congressional Record that the charge has been made against the Isthmian Canal Commission that it has been instrumental in importing women into the Isthmus of Panama from Martinique for immoral purposes.

I beg leave to advise you that this statement is absolutely and unqualifiedly false. Our labor agents in the West Indian Islands are only authorized to secure and pay the passage of laborers, and our records show that in no instance has money been expended except for the passage of laborers. Furthermore, our reports from Governor Magoon, Chief Engineer Stevens, the chief of police on the Isthmus,

and the manager of labor and quarters, as well as an examination of the vouchers and moneys paid, unite in confirming this statement.

The report of the chief of police to Governor Magoon, relative to the status of the women on the Isthmus, is comprehensive and conclusive. Among other things, he says:

A great many of these women have relatives working on the Canal Zone, and most of the balance are working at the various hotels along the line; are employed as domestics in the families of employees of the Isthmian Canal Commission, or are living with some one man exclusively. The balance find employment as laundresses.

As a class, these women are neat, clean, and industrious, and the records of this department show that none of them have been arrested for any cause whatever. Of the entire number which have arrived on the Canal Zone not more than three or four are common prostitutes.

Governor Magoon is as thoroughly alive to the necessity of maintaining decent moral conditions as he is to that of preserving clean health conditions, and his instructions to the police are as stringent in regard to enforcing the laws regulating the former as of the latter. The result of his instructions, carefully followed up, is best shown not only in this, but in all matters of police control, by the small number of arrests during the past year. The total number of arrests during the year was 2,373, or an average of 200 arrests a month, in a population estimated at 25,000. The number of convictions was 1,573. This will compare favorably with a similar population in any section of the United States.

I append hereto copy of instructions to recruiting agents in the West Indian Islands and copy of a voucher covering payment for transportation of laborers to the Isthmus, together with copies of reports relating to this matter.

Very truly, yours,

T. P. SHONTS.

Hon. W. B. ALLISON,

United States Senator, Washington, D. C.

Number J—.

SERVICE CONTRACT.

Entered into this ——— day of ———, 190—, at Kingston, Jamaica (B. W. I.), between the Isthmian Canal Commission of the United States of America and ———, of ———, age ——— years, a laborer, on the following terms, viz:

The Isthmian Canal Commission, through its representative and agent, agrees to receive the said laborer at Cristobal, Canal Zone, Republic of Panama, for work on the Isthmian Canal as a first-class laborer, and to pay him at the rate of ten (10) cents, U. S. currency, or its equivalent in the local currency of the Republic of Panama, for each hour's labor, and to furnish him free medical attention, medicine, and living quarters.

The said laborer binds himself to the Isthmian Canal Commission to serve faithfully and obediently, and to perform forty-five hundred (4,500) hours of labor during a term of two years, dating from the execution of this contract. Said labor to be performed during the regular hours for labor on the work, according to the schedule in force, and all labor performed during other hours or on Sundays or legal holidays to apply on the aforesaid term and to be paid for at the rate of one and one-half hours for each hour's labor performed.

The Commission agrees to have endorsed on this contract, by an authorized employee, at the end of each half-monthly pay period, the number of hours each laborer has worked, and such endorsement shall be the laborer's voucher as regards his fulfillment of this contract.

Alternative with next clause.—The Commission agrees to furnish the laborer free transportation from Jamaica to the Canal Zone, and upon completion of

the forty-five hundred hours' service above named, or before that time if he should be declared by the medical department of the Commission as physically incapacitated to fulfill his contract, agrees to furnish the laborer free transportation from the Canal Zone to Jamaica.

Alternative with previous clause.—The Commission agrees to furnish the laborer free transportation from Jamaica to the Canal Zone and to pay to the Jamaican government the sum of one pound and five shillings as a deposit to insure the laborer's repatriation. In consideration of such payment the laborer agrees that the sum of six (\$6.00) dollars U. S. currency shall be deducted from his wages at the rate of two dollars per month.

The laborer agrees to produce this contract at any time on demand of an officially authorized representative of the Isthmian Canal Commission, and to establish his identity by means of his signature or of his thumb print, as shown below, or both, when called upon to do so.

I agree to the above of my own free will and accord and hereby affix my signature and left thumb print.

Laborer.

I agree to the above on behalf of the Isthmian Canal Commission of the United States of America.

Special Agent, Branch of Labor and Quarters,
Isthmian Canal Commission.

Witness: _____

Imprint of laborer's
Left thumb.

_____, contract No. J _____, has served as follows on this contract:

During half month ending—	Division.	Department.	Gang No.	Hours worked.	Certified to by—	
					Name.	Title.

Under "Hours worked" will be included constructive overtime. In entering hours all of the columns not used must be filled with a cipher.

(Indorsed:) Service contract. Number J _____. Name _____. Occupation _____. Rating ____ gold per _____. Photograph.

ISTHMIAN CANAL COMMISSION,
DEPARTMENT OF CONSTRUCTION AND ENGINEERING,
BRANCH OF LABOR AND QUARTERS,
Cristobal, August 21, 1905.

Mr. C. H. R. RAVEN,
Agt. Cie. Generale Transatlantique, Colon.

SIR: We beg to acknowledge receipt of you by S. S. Martinique, on July 17th, 1905, one hundred and forty-four (144) laborers, accompanied by Mr. Ferraud, who was sent as foreman of laborers by Mr. Sittoon, our agent in Martinique.

We also confirm our arrangements with you regarding feeding these men on board steamer as follows: Supper, July 16th; coffee, July 17th; breakfast, July 17th, for which we agree to pay you sixty cents per head, at the following rate: Supper and breakfast, twenty-five cents each; coffee, ten cents.

Respectfully, yours,

HENRY BURNETT,
Asst. Mgr., Labor & Quarters.

W. J. G.

Isthmian Canal Commission to the Compagnie Generale Transatlantique:

1905.

August 17.	To the transportation of one hundred and forty-four laborers (144) from Fort de France, island of Martinique, to Colon, Republic of Panama, on the steamship <i>Martinique</i> , arrived on the 16th September at Colon, as per agreement with the Isthmian Canal Commission, at \$15.00 U. S. C. per head—U. S. C.-----	\$2, 160. 00
	To the transportation from same place to Colon on same steamer, arrived on same date, of Mr. Ferrand, who was sent as foreman for the same laborers—U. S. C.-----	52. 50
	To meals and coffee served to the same laborers on the 16th and 17th of August, before landing them—U. S. C.-----	86. 40
	To meals and coffee served to the foreman, Mr. Ferrand, on the same dates—U. S. C.-----	2. 40
		<hr/> 2, 301. 30

To the Isthmian Canal Commission, Panama:

Please pay above amount, say two thousand three hundred and one dollars and thirty cents U. S. currency to Messrs. Ehrmann & Co., of Panama.

C. H. R. RAVENS,
Agent De La Cie. Gle. Transatlantique.

{ Cie. Gle. Transatlantique,
Agence De Colon.

VOUCHER FOR ACTUAL TRAVELING EXPENSES.

[Isthmian Canal Commission. Appropriation: "Canal connecting the Atlantic and Pacific oceans." The United States to Cie. Gle. Transatlantique, Dr. Official station, Panama. Messrs. Ehrmann & Co., agents.]

Date.	Item.	United States currency.
1905. Aug. 17	To the transportation of 144 laborers from Fort de France, Martinique, to Colon, Panama, per S. S. <i>Martinique</i> , as per agreement with Isthmian Canal Commission, at \$15 United States gold each laborer-----	\$2 160.00
	To transportation from same place to Colon on same steamer arriving on same date of Mr. Ferrand, who was sent as foreman of above laborers...	52.50
	To meals and coffee served to above laborers on the 16th and 17th August before landing them-----	86.40
	To meals and coffee served to the foreman, Mr. Ferrand, on same dates....	2.40
	Total-----	2,301.30

Paid by check dated Oct. 9, 1905, No. 4950, on U. S. Asst. Treasurer, N. Y.
W. D. M.

I, _____, certify that the above account is correct and just; that I necessarily performed the above journey on public business, at time specified, under orders from proper authority; that the above expenses were actually and necessarily incurred and paid by me in performing said journey, and that, when practicable, receipts were obtained and are attached hereto.

Dept.

I certify that the above account is correct and just; that the men were received and price is in accordance with agreement.

(Signed) JACKSON SMITH,
Mgr. Labor and Quarters.

Audit No. 8358.

SEPTEMBER 29, 1905.

Examined and recommended for approval for twenty-three hundred and one dollars and thirty cents U. S. currency.

(Signed) C. S. TODD, *Chief Clerk,*
For LOCAL AUDITOR, ISTHMIAN CANAL COMMISSION.

Approved for the amount recommended by the acting auditor, and payment authorized.

(Signed) JNO. F. STEVENS,
Chief Engineer.

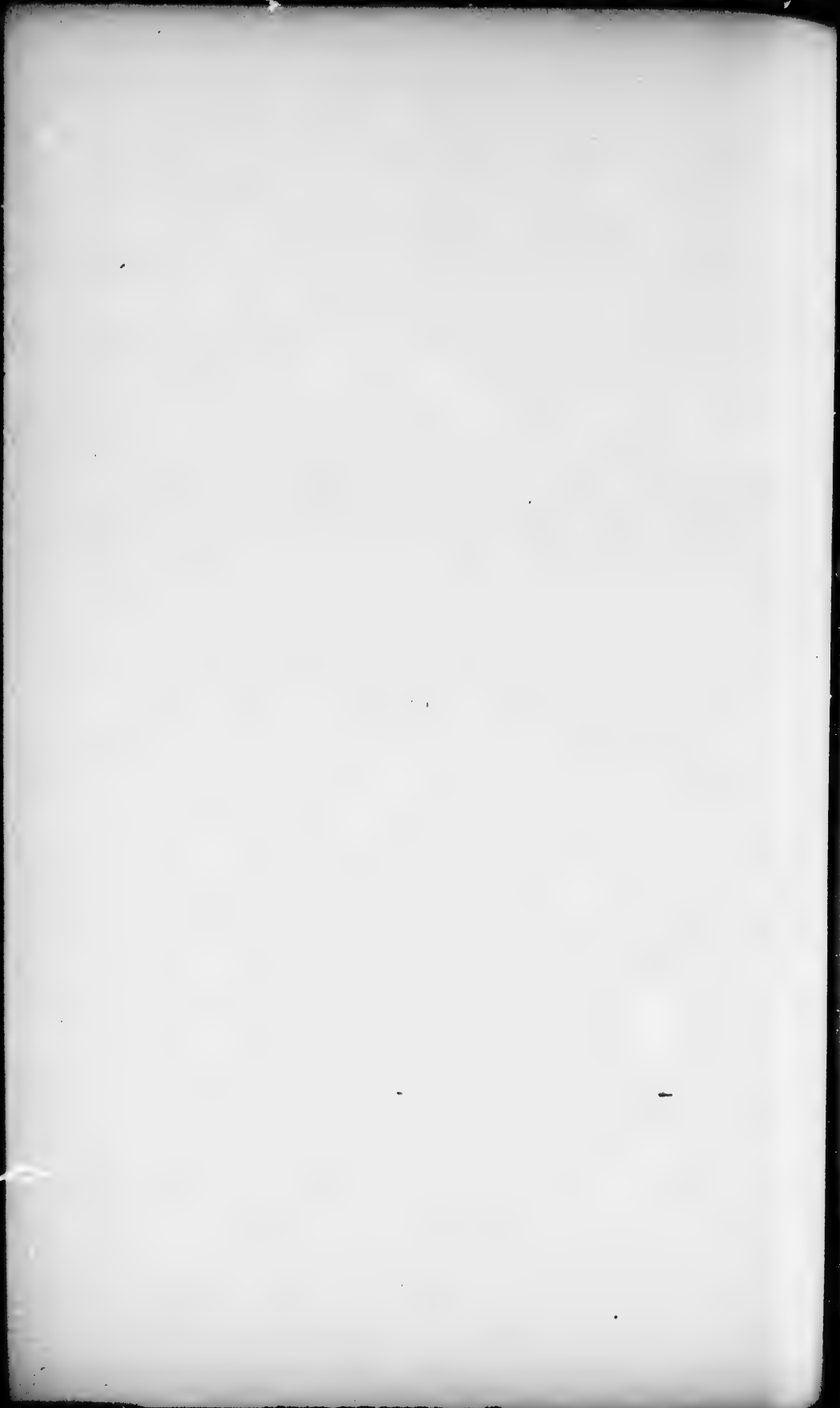
Received October 9, 1905, from Geo. C. Schafer, disbursing officer, the sum of twenty-three hundred and one 30/— dollars U. S. currency, in full payment of the above account.

(Signed) COMPAGNIE GÉNÉRALE TRANSATLANTIQUE.
EHRMAN & Co., *Agents,*
By J. EHRMAN, *Member of the Firm.*

(Executed in triplicate originals.)

(Indorsed: Voucher No. 2623. Month of October, 1905. Isthmian Canal Commission. Appropriation: "Canal connecting the Atlantic and Pacific oceans." Geo. C. Schafer, disbursing officer. Paid to Cie. Génl. Transatlantique for traveling expenses. Date of payment: October 9, 1905. Amount, \$2,301.30.)

ADDENDUM TO EXHIBIT D,
BEING EVIDENCE COMING TO HAND JANUARY 10, 1906.



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WAR DEPARTMENT,

Washington, January 10, 1906—11 a. m.

SIR: Yesterday afternoon, at a business interview between Mr. Shonts and myself concerning the proper expenditure of the funds recently appropriated by Congress, he incidentally mentioned the fact that Mr. Settoon, their labor agent in Martinique, was in the city for the purpose of telling the facts with respect to the shipment of Martinique women, treated of in the preceding exhibit. Mr. Shonts then advised me that for the first time, in conversation with Mr. Stevens, he learned that there had been brought into the Isthmus, at the expense of the Commission, other than actual laborers. He said that the Commission had never authorized it, but that Mr. Stevens, as chief engineer, and under his general authority to import laborers and in his anxiety to have the laborers satisfied, had given authority, after the quarters were sufficiently constructed, to Jackson Smith to introduce the wives and families of the laborers then on the Isthmus. Accordingly, I directed that Mr. Stevens and Mr. Settoon, who were in the city, should come before me this morning and submit to examination upon this subject, which I append as an addendum to Exhibit D, already filed in connection with the same subject.

Very respectfully,

WM. H. TAFT,
Secretary of War.

The PRESIDENT.

P. S.: This evidence does not in the slightest degree affect the correctness of the unqualified denial already made that women have been imported into the Isthmus for immoral purposes under the authority of the Commission or its agents. As a circumstance in support of this denial it was, on the authority of the records of the canal office, erroneously stated that the passage of any other than male laborers had not been paid out of canal funds. The evidence now submitted shows that without the knowledge of the Commission, but by order of the chief engineer, the passage of women from Martinique was paid, but that the women were carefully identified as the wives of laborers who had gone before to the Isthmus, or the daughters or sisters of such laborers; that every woman had a natural protector on the Isthmus, and that all were brought for needed legitimate domestic service and that not one was imported for purposes of prostitution or other immorality.

EXAMINATION OF MR. JOHN F. STEVENS.

Secretary TAFT. Mr. Stevens, you are the chief engineer of the canal. Last night for the first time, through Mr. Shonts, when he was here with respect to the general expenditure of the eleven millions, I was informed that there had been, contrary to the information which I had theretofore had, not under the authority of the Commission but under your authority, a payment of the passage of certain women from Martinique, and that he had not known it until you told him at the time Mr. Settoon came into the office, when he found that you had brought into the Isthmus other than actual laborers. Will you just state the facts with respect to it?

Mr. STEVENS. The entire matter?

Secretary TAFT. Yes.

Mr. STEVENS. Well, our people who handle the labor—Mr. Smith—advised me that many of these men objected to coming permanently unless they could bring their families along, and at that time our quarters were not in shape to take care of married people. We have nothing but bachelor quarters for the laborers. I told him that whenever we had our quarters in shape I should be willing that the laborers have their people brought over. He advised me soon after that we had room for a certain number, and I said, "All right; you can bring them over."

Secretary TAFT. How large a number?

Mr. STEVENS. I think 200 or 300.

Secretary TAFT. After that did they come?

Mr. STEVENS. Yes.

Secretary TAFT. Subsequently there was an investigation made as to what the women were doing on the Isthmus?

Mr. STEVENS. Yes.

Secretary TAFT. And the result of that was what we have already in the record—Captain Shandon's record?

Mr. STEVENS. Yes.

Secretary TAFT. Was this or was it not known to the officers of the Commission—this matter of paying the expenses of the families?

Mr. STEVENS. You mean the Commissioners themselves?

Secretary TAFT. Mr. Shonts and the Commission.

Mr. STEVENS. I did not report it to them.

Secretary TAFT. You simply acted under general authority?

Mr. STEVENS. Yes. I never report such payments except as they may reach the Commission through the auditor or some such channel.

Secretary TAFT. Mr. Stevens, here present is your agent, Mr. Settoon?

Mr. STEVENS. Yes, sir.

EXAMINATION OF MR. J. W. SETTOON.

Secretary TAFT. Mr. Settoon, I should like to ask you some questions. What were your orders?

Mr. SETTOON. In regard to the women?

Secretary TAFT. Well, first in regard to the men.

Mr. SETTOON. I—

Secretary TAFT. Mr. Settoon, I will first ask you what is your business?

Mr. SETTOON. I was sent there as a detail by Captain King and by Mr. Wallace.

Secretary TAFT. To do what?

Mr. SETTOON. To go to Martinique to obtain laborers.

Secretary TAFT. How long were you over there?

Mr. SETTOON. About four months.

Secretary TAFT. How many laborers did you send over?

Mr. SETTOON. About 3,000.

Secretary TAFT. Who subsequently became your superior?

Mr. SETTOON. Well, I suppose Mr. Jackson Smith; but my reports and my correspondence were all carried on entirely with the chief engineer. I was sent out by the chief engineer—by order of the chief engineer—and after Captain King was displaced from his position and Mr. Jackson Smith put in I received no official notice and therefore kept on reporting to the chief engineer as before.

Secretary TAFT. And received your instructions from him?

Mr. SETTOON. Well, I got only a few instructions by cable. All cables came signed by Stevens, and all letters I received by Mr. Jackson Smith. Smith was manager of labor and quarters.

Secretary TAFT. The telegrams were signed "Stevens" and the letters "Jackson Smith"?

Mr. SETTOON. Yes; but all these telegrams originated in Jackson Smith's office.

Secretary TAFT. After you sent the laborers, what instructions did you receive about sending women?

Mr. SETTOON. I was instructed to send 300.

Secretary TAFT. And whom were they to be?

Mr. SETTOON. They were to be—that was vague in the telegram but I had a previous understanding so that I knew what was meant. The telegram was just simply to make a shipment as soon as possible of 300 women. When I left it was understood that as soon as arrangements could be made the wives of the men would be sent.

Upon employing different men, when they put the question to me in regard to the possibility of their wives being brought, I told them it was possible that their wives would be sent to them, but not right now. For that reason when I did get the order to send the women I selected the wives, the daughters, or the sisters of some men who had already gone, giving them the preference. Every woman who was sent there had a natural protector on the Isthmus.

Secretary TAFT. How many applications had you?

Mr. SETTOON. About 1,500.

Secretary TAFT. What women made application to you?

Mr. SETTOON. They were from all portions of the island, of all ages and kinds.

Secretary TAFT. Had you a list of the men who had been sent?

Mr. SETTOON. Yes, sir.

Secretary TAFT. Were you able to identify the women?

Mr. SETTOON. To a considerable extent. I had young men there acting as my clerks, and a large amount of them were absolutely identified right there.

Secretary TAFT. Did they make a statement as to their relationship?

Mr. SETTOON. Yes, sir.

Secretary TAFT. Did you allow any women to go who did not have natural protectors on the Isthmus?

Mr. SETTOON. I did not.

Secretary TAFT. How many were sent?

Mr. SETTOON. As well as I remember, 283.

Secretary TAFT. And they were selected from 1,500?

Mr. SETTOON. About 1,500.

Secretary TAFT. Where did they come from?

Mr. SETTOON. Mostly from the interior of the island.

Secretary TAFT. Were they laboring women or prostitutes?

Mr. SETTOON. Laboring women.

Secretary TAFT. Did you knowingly send a single prostitute?

Mr. SETTOON. I did not. I made it my business to see that that kind did not come. When I got the order to send these women down there I was a little disturbed from the fact that I was fearful that criticism would grow out, and I made every effort possible to minimize that condition by selecting women that were all right, and by selecting those above the average age.

Secretary TAFT. What was the average age of the women you were sending?

Mr. SETTOON. From 30 to 50. There were very few below 30 years of age. In those tropical countries a woman 30 years of age becomes elderly.

Secretary TAFT. Out of the 283 sent, how many were wives?

Mr. SETTOON. I can not exactly remember. About 200 were wives.

Secretary TAFT. And what were the remainder?

Mr. SETTOON. They were sisters or daughters of men who were already there.

Secretary TAFT. Had you any purpose, or did you gather from Mr. Stevens or Mr. Smith that there was any purpose in importing those women—importing them for immoral purposes?

Mr. SETTOON. They were all sent there for the purpose of relieving the congestion of household service. There was an absolute dearth of it. The men were clamoring for their wives to come. I had been given authority to promise to a certain degree, and it was the carrying out of that. They were absolutely needed on the Isthmus in their capacities, just as we needed laborers on the canal.

Secretary TAFT. Do you, or do you not unqualifiedly deny that there was any purpose in sending these women to furnish prostitutes to the men on the Isthmus?

Mr. SETTOON. Absolutely. Had I been advised of such a thing I should never have consented to it. I should have resigned my position in preference to sending them.

Mr. SETTOON. As a matter of fact I have sacrificed a portion of my vacation to come here and make this thing clearly understood by Mr. Stevens and Mr. Shonts.

Secretary TAFT. Where did you come from?

Mr. SETTOON. I came from New Orleans. I am on my vacation now.

Secretary TAFT. Have you been to the Isthmus since you left Martinique?

Mr. SETTOON. When I returned from Martinique to the Isthmus, the first thing I did was to make an investigation from end to end of the Isthmus, visiting their camps where men I had sent from Martinique were at work and where these Martinique women were, and,

with very few exceptions, I found among both the men and the women, particularly the women, satisfaction prevailing.

Secretary TAFT. Did you find the women represented to you as wives living with their husbands?

Mr. SETTOON. Something over 100 were living with their husbands; others who were brought over as wives and claimed to be wives, and I have no doubt were, were servants in various households.

Secretary TAFT. Had it been represented to you or not that there was a dearth of laundresses and household servants?

Mr. SETTOON. Yes, sir; I knew that to be a fact. I knew there was a crying need of them.

Secretary TAFT. I want to ask you with reference to Martinique and the customs which prevail there. Is it the custom for a man in those islands to live with a woman as man and wife and not be married?

Mr. SETTOON. Yes, sir.

Secretary TAFT. How is it as to the legally celebrated marriages compared with these unions which are actual but not attended by legal ceremony?

Mr. SETTOON. Those not attended by legal ceremony, I suppose, would be in proportion to three to one.

Secretary TAFT. In such illegitimate unions are the men usually faithful to their wives?

Mr. SETTOON. Yes, sir; and their wives are usually faithful to their husbands.

Secretary TAFT. And have children and look after the family?

Mr. SETTOON. Yes, sir; they observe it quite as strictly as legal marriage vows.

Secretary TAFT. Where have you been before this?

Mr. SETTOON. I am a surveyor; my home is in Louisiana and I held a municipal office down there.

Secretary TAFT. You are a surveyor by profession?

Mr. SETTOON. Yes, sir.

Secretary TAFT. And an engineer?

Mr. SETTOON. Not so much.

Secretary TAFT. And you went to the Isthmus?

Mr. SETTOON. I happened down there and met Major Black and two or three others. I was there when the matter was turned over to Lieutenant Brooke.

Secretary TAFT. Major Black, of the engineers, and Lieutenant Brooke, of the engineers?

Mr. SETTOON. Yes, sir.

Secretary TAFT. You then became an employee of the Canal Commission?

Mr. SETTOON. Yes, sir. I am the oldest man employed since the Government took hold.

Secretary TAFT. Where in Louisiana is your home?

Mr. SETTOON. At New Orleans. I was born and raised in Livingstone Parish.

JANUARY 9, 1906.

MEMORANDUM OF INQUIRY MADE BY CHAIRMAN SHONTS AND CHIEF ENGINEER STEVENS INTO THE ALLEGED IMPORTATION OF MARTINIQUE WOMEN INTO THE CANAL ZONE FOR IMMORAL PURPOSES, THE SAME BEING THE STATEMENT OF MR. S. W. SETTOON, RECRUITING AGENT OF THE COMMISSION, WHO WAS IN DIRECT CHARGE OF LABOR RECRUITING FROM MARTINIQUE, AND SUCH MEMORANDUM BEING BASED ON THE STENOGRAPHIC NOTES MADE AT THE TIME OF THE INQUIRY.

Mr. Settoon stated:

Fearful of criticisms in the shipment of these women from the island of Martinique on the Canal Zone, as directed to, was careful to see that no woman was sent on the convoy who did not have a natural protector already on the Isthmus.

There were 283 sent. These were selected from over 1,500 who presented themselves desiring to go. Before accepting any one, the party presenting was required to give name, place where lived at. Lists were then examined of men who had previously been shipped from the island to the Canal Zone as laborers, and unless the party presenting was either a wife, a daughter, or a sister of some one who had been already sent she was rejected.

Of the 283 sent, more than 200 were wives; the remainder were daughters or sisters. A majority of them were beyond the age of 30. This was done for the purpose of getting elderly, settled women, who would be, or likely to be, good and reliable servants on reaching the Isthmus.

It is absolutely false that any of these women were of lewd character, or were sent to the Isthmus for any such purpose.

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EXHIBIT E.

[Translation of cablegram received at 8.45 p. m., October 2, 1905.]

ISTHMIAN, Washington:

French steamer *Versailles* arrived Colon Harbor Saturday, September 30, with 579 passengers from Martinique and 300 Colombians destined for work on canal. Panama health regulations require immigrants to be vaccinated. Two hundred Martiniques refused and remained on vessel, declaring they must be given free return to Martinique. Agent steamship line appealed to French consul for assistance in inducing them to land. Consul persuaded 75 to be vaccinated, but his efforts with remainder counteracted by voodoo doctor. Consul then requested Panama police to assist ship's officers in relieving vessel. It is customary for the Zone police stationed at Cristobal to assist Colon police in handling crowds of passengers going from docks to railway train, and chief of Colon police called on Zone police officer at Cristobal for the usual assistance. A sergeant and 8 policemen went to dock. Shortly after their arrival the men came off the ship with a rush, seeking to avoid vaccination by getting away. In checking the rush the Panama and Zone police used their clubs. No one was seriously injured. The men were vaccinated and taken to Corozal, and all but one are at work to-day.

MAGOON.

DEPARTMENT OF STATE,
Washington, October 21, 1905.

SIR: I have the honor to inclose for your information copy of a dispatch from the American minister to Panama, transmitting a copy of the official report to his Government of the vice-consul of France at Colon in regard to the action of the Panama and Zone police in using force to compel certain laborers from Martinique to disembark from the French vessel *Versailles* at Colon.

I have the honor to be, sir, your obedient servant,

ELIHU ROOT.

The SECRETARY OF WAR.

No. 12.]

AMERICAN LEGATION,
Panama, October 10, 1905.

SIR: I am advised that there have been published in the press of the United States sensational articles criticising the action of the Panama and Zone police on the 1st instant in compelling 125 Martiniquans to disembark from the French vessel *Versailles*, lying in the harbor at Colon.

The French consul at that port has supplied me with a copy of his official report to his Government respecting the incident, and as the facts therein

stated are substantially as reported to me by the Panama and Zone officials, and the matter is one affecting French interests exclusively, I transmit a copy of said report for the use and information of the Department.

I have the honor to be, sir, your obedient servant,

CHARLES E. MAGOON.

The Hon. ELIHU ROOT,

Secretary of State, Department of State, Washington, D. C.

VICE-CONSULATE OF FRANCE AT COLON.

[Copy of letter addressed on October 2 by the vice-consul of France, at Colon, to the secretary of foreign affairs, Paris (American section).]

I have the honor to confirm to your excellency my code telegram of this morning, which in substance says:

"About 140 Martiniquan laborers who, on September 20, arrived on the Compagnie Générale Transatlantique's steamer *Versailles*, destined to work for the Canal Commission, refused to land under the pretext of having received information as to the unhappy fate awaiting them—an information entirely devoid of truth—and furthermore insisting on being immediately returned to Martinique. It was decided yesterday, Sunday, after many fruitless endeavors to arrive at an amicable understanding, to expel them, with my consent and in my presence, from the ship, through the intervention of the Panamanian and American police; as a consequence of which measure no deaths resulted, but many were more or less wounded."

The steamer *Versailles*, from St. Nazaire and way ports, really brought to Colon 664 laborers, coming from Fort de France (Martinique) in charge of an agent for and at the expense of the Isthmian Canal Commission.

About 520 of these laborers landed without causing any difficulty, but the rest, of about 140, refused to come on shore under the following pretexts:

First. They alleged that the vaccination to which the American authorities subjected them, in accordance with the regulations governing immigration, was "for the purpose of branding them with an inextinguishable mark, thereby forever preventing their leaving the Isthmus."

Second. And above all, they claimed that some of their countrymen, who had come alongside the steamer on their arrival, had described to them the life in the workshops of the canal, especially as regards food, habitation, and medical assistance, in the darkest of colors.

Efforts were made during the whole day of the 29th by Messrs. Lelanchon, M. Leca, and M. Raven, commander of the ship, chief of the maritime postal service and agent of the Compagnie Générale Transatlantique, respectively in the order named, as also by the other officers of the ship, to convince the stubborn passengers of the groundlessness of their allegations and to induce them to land. These latter expressed their desire of interviewing the French vice-consul.

I, therefore, at the request of Commander Lelanchon, went on board on the morning of the 30th. I listened to the claims of the Martinicans, claims which I endeavored to refute, I told them that in my reports to the local government of Fort de France, and at its request, I had kept it fully advised as to the conditions existing on the Isthmus in regard to laborers, but that I had never intimated the existence of conditions such as these people seemed to anticipate, and could not have done so without perversion of the actual facts, facts which on the other hand I thought it my duty to fully explain to Mr. Bonhoure. But it was plain that these people did not intend to listen to reason, but had obstinately made up their minds not to leave the ship. In view of this, I called their attention to the fact that they had no right to remain on board after duly arriving at their destination, and that the agent of the Compagnie Générale Transatlantique would apply to the police to expel them from the ship. To this they replied that they wanted to return to Martinique and that the governor of the colony and the president of the general council would pay their return fares on their arrival at Fort de France.

In vain did I explain to them that Mr. Bonhoure had written me that he advised them that "it was at their own expense and risk that they came to the Isthmus under contract, and that the government of the colony could in no manner undertake to return them to their country." They then said that they

were voters and that their respective senators and congressmen would know how to defend them against anybody.

(In the communication from this vice-consulate, dated August 23, addressed to the Department, this matter has been fully dealt with. I attach to this copy of a communication from Mr. Bonheure, dated August 23, on the same subject.)

The situation underwent no change during the balance of that day. In accordance with instructions from the agents of the Isthmian Canal Commission, no food was supplied to these passengers during the days of the 29th and 30th of September. Nevertheless, after conferring with me, Commander Lelanchon, for humanity's sake, decided to furnish them with a meal on the evening of the 30th. Neither hunger nor persuasion had any effect on these people, who declared that "they were ready to die on board of the French steamer before marching to martyrdom, which they would do by voluntarily coming on shore."

On the morning of October 1 I was informed by the agent of the Compagnie Générale Transatlantique that he was about to ask for the assistance of the police, in order to expel the Martinicans from the ships, and he asked me to authorize the police to board the steamer *Versailles*. I acceded to Mr. Raven's request, and personally accompanied him to the office of the chief of police. This latter advised the port captain and the governor of the province, Mr. Porfirio Melendez, of the matter. Mr. Melendez joined us on board the steamer. He on his part tried to make the mutineers desist from their purpose, but in vain. The only answers he obtained were angry growls and threats. Mr. Melendez, however, not wishing to take vigorous measures without first receiving superior orders, and, moreover, considering the police force at his command inadequate, sent a telegram to the President of the Republic at Panama, requesting authorization to ask for the cooperation of the American Zone police. In the meantime a detachment of American police was gotten ready and the mutineers notified that they were given just two hours to decide.

During this time of grace Mr. Lelanchon, the commander, Mr. Leca, the "controleur," and myself made new efforts to conciliate these people, and some of them showed a disposition to give in, but the instigators prevented them therefrom. Only three of them left the group that had gathered on the forward deck of the steamer.

At 4.15 p. m. President Amador's answer was received, authorizing the intervention of the Americans.

After a last but fruitless effort to arrive at an amicable arrangement the two police detachments—American and Panamanian—proceeded to the forcible ejection of the mutineers. Orders had been given that the use of firearms or bayonets should only be resorted to in case of extreme necessity. It did not become necessary to use anything but clubs and these were liberally applied to the heads and shoulders of the rioters. About 50 of these latter, in order to escape blows, jumped overboard, but of course were immediately rescued by the boats of the *Versailles*, under command of Lieutenant Simon, who particularly distinguished himself in this work of rescue. Within a few short moments the police become masters of the situation.

Among the police the Panamanians, who naturally are, in their majority, of a sanguinary temperament, and whose nerves had been subjected to great strain by having been stationed all day long before the mob that insulted them and threatened them with knives, were held in check—thanks to the presence of the governor, the commander of the ship, the "controleur," the agent of the Compagnie Générale Transatlantique, and the undersigned, who did all in their power to repress any unnecessary violence. Fortunately no one was seriously wounded, and the injury received in the neck of one of the Martinicans is not believed to be fatal.

The Martinicans, once ashore and subdued, were vaccinated, and after being fed were immediately taken to the Canal Zone. An American surgeon accompanied them for the purpose of giving the wounded first aid.

I have expressed to Governor Melendez and the chief of the American police the great satisfaction I have felt in seeing the conflict with the rioters without the shedding of blood. I felt it also incumbent upon me to praise the patient and humane conduct of Commander Lelanchon, that of his officers, as also that of Mr. Leca (controleur), which these gentlemen observed toward the passengers, a conduct which I shall feel constrained to bring to the notice of their superiors.

With pleasure I testify to the many and repeated efforts of these gentlemen to overcome the stubbornness of the Martinicans by appealing to their self-respect and to their dignity and patriotism, efforts that were only unsuccessful

because of the malign influence of a dozen agitators, whom to separate from the rest of the people it had unfortunately been impossible.

I consider that most especially high official recognition is due to Commander Lelanchon, already a knight of the Legion of Honor, for his conduct during these three trying days, and I earnestly solicit for him the reward for his noble conduct, which even the Martinicans acknowledged, in my presence, to have been irreproachable.

I must also make mention, in a special manner, of Mr. Leca, maritime postal agent, who was on board the *Versailles*. At the time when I personally endeavored to make a last effort at reconciliation of the rioters, Mr. Leca pulled me back, earnestly imploring me to retire, as I was in eminent danger, and, in fact, one of the Martinicans near me pulled out of his belt a long knife and assumed a threatening attitude.

It was evident that, although my object was only to arrive at an amicable understanding, it was impossible for me to remain in the midst of those frenzied people without incurring great risk.

I hastened to thank Mr. Leca, but I would feel grateful if the department would bring the fact just stated to the knowledge of the under secretary of the post-office department, so that Mr. Leca may receive, in addition to my gratitude, an official recognition, his conduct in this matter, as before stated, deserving great praise.

G. BONHENRY.

G. BONHENRY,
Vice-Consul of France.

VICE-CONSULATE OF THE REPUBLIC OF FRANCE AT COLON, ISTHMUS OF PANAMA.

[Copy of letter addressed under date of October 4, 1905, by the French vice-consul at Colon to the city mayor.]

SIR: I have the honor to acknowledge the receipt of your esteemed communication of yesterday's date, bearing No. 9, regarding the body of a drowned man which was found between piers Nos. 3 and 4, supposed to be that of one of the Martiniquans, who, on the afternoon of the 1st instant, jumped over board from the French steamer.

According to authentic documents before me I am satisfied that of the 664 laborers brought here by the steamer *Versailles* from Fort de France for the Isthmian Canal Commission all have been received and completely accounted for by the chief of the labor department at Cristobal.

For this reason the supposition that the drowned man referred to should have been one of the aforesaid Martiniquans is inadmissible.

I am, sir, your most obedient servant,

G. BONHENRY,
Vice-Consul of France.

A certified copy of the original. Colon, October 7, 1905.

G. BONHENRY,
Vice-Consul of France.

OCTOBER 25, 1905.

SIR: I have the honor to acknowledge the receipt of and to thank you for your letter of the 21st instant inclosing copy of a dispatch from the American minister to Panama transmitting a copy of the official report to his Government of the vice-consul of France at Colon in regard to the action of the Panama and Zone police in using force to compel certain laborers from Martinique to disembark from the French vessel *Versailles* at Colon.

Very respectfully,

WM. H. TAFT,
Secretary of War.

The SECRETARY OF STATE.

ISTHMIAN CANAL ZONE, EXECUTIVE OFFICE,
Ancon, Isthmian Canal Zone, October 10, 1905.

SIR: Referring to cablegram of October 2, respecting the difficulty which occurred on the French steamer *Versailles* at Colon on October 1, I have the honor to forward herewith copy of a report submitted to me by the prosecuting attorney of the Canal Zone of an investigation made by him of the matter; also copies of the statements of the agent of the steamship company, the captain of police of Colon, Doctor Pierce, the quarantine officer of Colon, and the French vice-consul at Colon, together with a copy of the official report of the consul addressed to his Government, and a copy of a letter addressed by the vice-consul to the prosecuting attorney, all referred to by the prosecuting attorney in his report.

These papers are sent for the files of the Washington office, and for such use as may be desired to make of them.

Very respectfully,

CHARLES E. MAGOON, *Governor.*

CHAIRMAN ISTHMIAN CANAL COMMISSION,
Washington, D. C.

ANCON, October 10, 1905.

SIR: I have the honor to report with reference to the debarkation of 684 Martiniquans at Colon, in the Republic of Panama, wherein it has been reported that force and violence were used by the police force of the Republic of Panama and the police of the Isthmian Canal Zone.

In accordance with instructions, I went to Colon and investigated the affair. I received a statement from the agent of the steamer *Versailles*, which arrived in Colon on Friday, September 29, with the Martiniquan laborers, also a statement from the captain of police at Colon, a statement from Dr. Claude C. Pierce, quarantine officer at Colon, also a statement from the French vice-consul, as well as a copy of his official report addressed to the French Government, at Paris, all of which I have the honor to herewith submit.

The rumors circulated that the passengers were cruelly treated by the police of Colon and the police force of the Canal Zone have no foundation at all. About 150 of the passengers refused to leave the ship, as a pretext therefor stating they would not be vaccinated. The captain of the ship called upon the French vice-consul, who used his influence to persuade the passengers to go ashore and carry out their contracts, but his entreaties were of no avail. Finally he was compelled to call upon the police force of the Republic of Panama at Colon to eject these men from the vessel.

Fearing a riot between the police and the passengers, Governor Melendez, of the province of Colon, requested that a detail of Zone police enter the Republic and assist, as their presence might prevent serious trouble. Finally, on October 1 the men were taken from the ship one by one and safely sent to their destination.

The French vice-consul, who was present, in a letter addressed to me of October 7, in conclusion, states the following: "I avail myself with pleasure of this opportunity to express again my thanks for the assistance rendered on that occasion by the Zone police, who greatly contributed to the conclusion of the conflict without any loss of life or bloodshed."

With reference to the body of a man found a few days later floating in the water between piers 3 and 4 at Colon, I have the honor to state that in a letter addressed by the vice-consul of the Republic of France at Colon to the alcalde of Colon, of October 4, 1905, with reference to the body of a drowned man, supposed to be one of the Martinique passengers who jumped overboard on the afternoon of October 1, conclusively proves that the drowned man was

not one of the passengers of the steamer *Versailles*, as the letter states that the vice-consul has authentic documents in his possession which show that the 664 laborers all landed and were accounted for.

Therefore the conclusion must be that the reports were unfounded, all of which I have the honor to submit.

Very respectfully,

J. M. KEEDY,
Prosecuting Attorney.

HON. CHAS. E. MAGOON,
Governor of the Canal Zone, Ancon.

[Statement of the agent of the steamship company.]

The steamer *Versailles* arrived on the morning of Friday, September 29, bringing laborers for the Canal Commission—664 from Martinique and 236 from Cartagena. As the Canal Commission could not receive the laborers on their arrival, they asked me to keep the men on board the steamer until Saturday, when they would take charge of them. There was no reason why we should not keep them on board, because the Commission usually paid for holding them in that way. On the morning of Saturday, September 30, at 6 o'clock, we started to land them, and they asked first to land the Martinique laborers. They were coming one by one, calling their names, but after we had landed many of them the others refused to come, and I personally asked them why they did not want to come off the boat. They replied that they did not want to be vaccinated. Doctor Pierce and the others who accompanied him can confirm this statement.

After telling them that the vaccination was only a slight operation to prevent them from getting sick, they said they had been told by people down here that it was not a real vaccination; that it was a mark meaning that they should never go back to their own country. I then told them that this was false. Thereupon they started to land the Martinique laborers. They landed the Colombians, and they went ashore without any trouble. I then tried to convince them that the rumors which were circulated were false, but this had no effect upon the laborers. I then called upon the Canal Zone people and told them that the laborers refused to come ashore, and the Canal Zone people informed me that they could do nothing, because it was now a matter to be handled by Doctor Pierce, because the doctor would not allow them to land before they were properly vaccinated, in accordance with the sanitary regulations existing here, and also in accordance with the laws of Panama. The steamship company had fulfilled its contract by bringing the men down here, and the captain of the ship said that he would keep them aboard until the following day, so as to give the laborers time to reflect, and to see whether or not they would leave the ship.

The following day (Sunday, October 1) Doctor Pierce went aboard the ship and asked the laborers if they would submit to vaccination and go ashore. I went to the canal people, and they sent me to the checker, and the doctors were ready for the laborers. The men stated that they did not care to be vaccinated, that they wished to return home to Martinique. I told them that the vaccination would not prevent them from coming ashore; that they were free to come, provided they would apply at my office for return transportation. They said they would not leave the ship, whereupon the captain of the vessel asked me what to do with them; whether to keep them on board the vessel or to have them ejected from the ship by the Colon police force. I might mention that on the day the men refused to be vaccinated by Doctor Pierce a detachment of armed Colon police was sent aboard the vessel to see that none would leave the ship without being vaccinated by the doctor. This same day Doctor Pierce sent a telegram to the chief quarantine officer of Panama, and on the following day the doctor received a reply, instructing him to proceed in whatever way he thought proper to get the laborers off the vessel.

In accordance with the laws of my Government I am not authorized to have a police force go aboard a vessel without the consent of the consul. I then asked the consul if he could let me have policemen go aboard to compel the men to leave the vessel. I was, of course, responsible for their passage home, but

as none of them had any money I was unable to allow them to return to Martinique. As they were trespassers it was necessary to have them ejected from the ship. The consul consented to let me have policemen go aboard the vessel to compel the men to be vaccinated and to leave the steamer. With the consul's consent I went to the Colon police officers for assistance in getting the men off the vessel. The consul and the captain of the ship accompanied me on board the steamer, and the captain of the Colon police stated that he wanted to see Governor Melendez, but the governor was not in town at that time.

The governor finally arrived and asked if he should have policemen eject the men from the ship, and I said "yes." The police force of the Zone were notified by Governor Melendez that he would need their assistance, whereupon they prepared to come to Colon, and when they came Governor Melendez sent a telegram to President Amador, stating that he had asked the Zone police to give us assistance, and asked the President if he was right in so doing. When the laborers saw the police in Colon they revolted.

Question. What was the conduct of the Zone policemen? How did they behave themselves?

Answer. I was present and I can assure you that they have used no force whatever against the laborers. Their conduct was good, in my opinion. They merely took the men by the arm and tried to get them to leave the ship, but no force whatever was used by the Zone police. When Governor Melendez arrived on board he addressed the laborers on the vessel and gave them two hours (that is, until 4 o'clock) for reflection. At 4 o'clock, when President Amador's telegram arrived, he said that the time had passed; that it would then be necessary to eject them by force. The laborers then said: "We refuse; we will not go on shore." Then the Colon policemen took the men off, and the Zone police assisted them in doing so.

About two days later a man was found washed up on the shore, having been drowned. He could not have been one of the passengers on the ship who jumped overboard, because the number of men brought from Martinique tallied with the list that we had, which conclusively shows that the number of men placed upon board the vessel at Martinique were delivered here at their destination complete and were receipted for by the manager of the branch of labor and quarters of the Isthmian Canal Commission.

Question. Can you give a reason why the man jumped overboard?

Answer. There is no reason. They refused to come ashore. They mutinied, were defiant, and sooner than be taken off by the police and going down the gang plank they jumped overboard. I assured the men that no harm would come to them. It is not uncommon that laborers on the various piers fall overboard from some cause or other, and the rumor was started about this drowned man being one of the passengers, simply because his body was found a few days after the landing of these laborers.

[Statement of the captain of police of Colon.]

The captain says the policemen were ordered by Governor Melendez to go to the boat and take the men off, and he obeyed. This request was made by the French consul through Governor Melendez. The French consul came to the police station. As it was business which he could not perform himself, he consulted Governor Melendez. The agent of the steamship company and the captain of the port, and Governor Melendez, with the French consul, came to the police station.

A copy of the report, dated October 2, from the captain of police to Governor Melendez, with reference to this occurrence, is herewith attached.

We tried to get the men off the boat peaceably, and when we found that they would not come off in that way, I consulted Governor Melendez as to my duties. I went aboard the ship with the governor, by the request of the captain of the steamer, and some policemen prevented the men from scattering on the ship. The governor told me to put them off the boat, but I used as little force as possible. There were about 150 laborers on the ship, and the police force numbered about 25.

The trouble originally started by the men because the men on board the ship refused to be vaccinated, and the policemen compelled them to yield to vaccination, in accordance with the sanitary regulations.

Question. When the policemen boarded the ship, what did they do?

Answer. The policemen did nothing at all.

Question. Did not the captain of the ship ask the policemen to put the men off?

Answer. Both the French consul and the agent of the steamship company asked the policemen to put them off the ship. As the laborers had no money to pay their return passage, the agent of the steamship company and the captain of the ship asked that they be put off. Some of the laborers had knives and revolvers.

Question. Did you put them off the ship?

Answer. We asked the laborers to come off peaceably, and as they refused they were put off with force, in accordance with Governor Melendez's orders. We were compelled to club some of the laborers in order to subdue them. If it had not been for the energy of the police force there would have been a great deal of trouble on the boat, as the laborers were defiant and determined not to leave the ship; and they were well armed. Some of them threw themselves overboard to swim ashore, and they were all taken out of the water. I do not think anyone of them was drowned, because the count tallied. About three days after this the corpse of a colored man was found on the shore at Colon. He was not recognized by anyone. His body was in a state of decomposition. It is not uncommon for men to drown here, there being so many laborers employed on the different wharves and steamers.

[Statement of Dr. Claude C. Pierce, quarantine officer, of Colon.]

The French steamer *Versailles* arrived in Colon on Friday, September 29, about 9 a. m. I went on board and found that there were 668 laborers from Fort de France and 353 laborers from Cartagena, besides the other cabin and transient passengers. We commenced inspection and got through with all the first-cabin passengers, all the miscellaneous steerage, and then allowed the vessel to come alongside the wharf and discharge mail and passengers. We then started in to inspect the laborers, and took first the Colombians and Cartagenians. All those passed by and were inspected, and were vaccinated where found necessary. We then started in on the Martinique laborers, and about 400 of them voluntarily passed inspection and were vaccinated where found necessary.

About 1.30 p. m. the laborers stopped passing in front of the little table we had there where Doctors Moore, Darby, and I were inspecting, and I told the captain of the ship to bring them up, as we wanted to get through as soon as possible, and hurry them along, and the captain and other officers of the ship went back aft where the negroes were, and after being gone a few minutes he came back and said that the negroes refused to come forward; that if the doctor wanted to see them he had to come aft. I went back aft, so as to avoid delay and vaccinate a few more—about 25 or 30 of them—and then they positively refused to come by at all; they said they did not want to pass inspection; that they were going to stay on the ship.

At that time the captain of the vessel stated that there were approximately 225 left. As those men refused to pass inspection, and the majority of the passengers on board the ship had already passed, we wanted to keep those two classes separate, so as to avoid having all those already inspected to go over again the next day. So I went up and saw the captain of the Colon police and told him that there were about 225 Martinique laborers who refused to pass inspection, and asked him to send a detail of policemen on board to keep those men separated from the others. He sent down four Colon policemen with arms, and stationed them across the break of the poop with instructions to allow no one to pass down onto the other part of the deck.

The next morning, Saturday, September 30, the laborers who had already passed inspection were taken off the ship by the labor agent of the Canal Commission. I was on board early, accompanied by Doctor Moore, to be on hand to vaccinate anyone who was ready to be inspected and passed upon. Then the captain of the vessel began to take out the baggage belonging to every passenger. The baggage of these men was mixed with the baggage of the other passengers, and when the negroes saw their trunks being taken ashore quite a number of them submitted to inspection, so as to get ashore and look after their baggage. Then some of the negroes who had refused said they wanted to see the French consul.

A messenger was then sent for the French consul, who sent his clerk down, and later the consul himself came. They were told that in order to land they would have to submit to inspection. During the time these men had been detained in the after part of the ship they had not been furnished with any food or water. This was because the only way of getting food and water to them was for the sailors on the ship to carry it to where they were, and the captain of the vessel stated that if anyone wanted to come down and get food and water they can do so, but in order to do so they would have to pass inspection. These men stayed back aft all day Saturday, September 30, without food or water, and during this time the agent of the steamship company, the French consul, the representative of the labor bureau of the Isthmian Canal Commission, and Martinique laborers who were already ashore, were allowed to come on board and make speeches to the men, urging them to submit to quarantine inspection and come on shore.

On Friday afternoon, September 29, and all day Saturday, September 30, about 50 of the men submitted to quarantine inspection; others were picked out who showed evidences of having had smallpox and were therefore already protected, and were told that they could come on shore, but they refused, stating that they would remain with their companions and go back to Martinique. On Saturday evening, September 30, the captain of the ship stated that he could no longer deprive these men of food and water, and he ordered the sailors to carry food and water to them, which was done. The agent of the steamship company was desirous of getting these men off the ship, as was also the captain of the vessel, and on Sunday morning, October 1, Doctor Moore, Doctor Darby, and I went on board prepared to inspect the negroes if they decided to leave the ship.

In the meantime a telegram had been sent to Surgeon Perry, the chief quarantine officer in Panama, advising him of the condition of affairs and recommending that the laborers be forced to disembark, placed on the *La Valle*, a vessel belonging to the Isthmian Canal Commission, and carried to some point near Cristobal and detained there until they submitted to inspection and vaccination, if necessary. An answer was received on Sunday morning, October 1, giving authority to do this or to take any measures I thought necessary to compel the men to submit. In this telegram it was stated that the chief sanitary officer concurred.

When I found on Sunday morning that the men still refused to submit to inspection and vaccination I told Mr. Raven, the agent of the French company, that I was going to turn the matter over to him to force the men to land, as it was not in the province of the quarantine officer to force these men off the vessel. I further told him that I would be on hand ready to inspect such passengers as desired to land. Mr. Raven went to see the captain of the port of Colon, and asked him to send down additional armed Colon policemen to enable him to force these negroes to leave the vessel. After great delay Mr. Raven returned and stated that the captain of the port told him that as it was Sunday and not a working day for the Colon government he had no clerk at hand to write the order to the captain of the Colon police to enable him to get these policemen. I then went with Mr. Raven to the house of the assistant captain of the port, Mr. Mendez, and Mr. Mendez stated that he could not send policemen unless I issued a request for same.

I sat down in Mr. Mendez's house and wrote him an official letter, requesting that he let me have the assistance of 12 armed Colon policemen to see that the laws relating to quarantine inspection and vaccination be carried out on board the steamship *Versailles*, lying at pier 2 of the Colon wharf. I stated in this letter that it was to carry out the laws of the Republic of Panama regarding the matter of vaccination, and cited the fact, as a footnote to the law, that the police of Panama are directed to give assistance in its enforcement. I further cited that this was promulgated as a proclamation by the President of the Republic of Panama. Mr. Mendez wrote an order to the captain of the Colon police directing him to put 12 armed Colon policemen at my disposal. I delivered the note in person to the captain of police, being accompanied by Mr. Raven, the agent of the French company, and the 12 policemen were sent on board under the command of a captain of police. When we went on board I had the policemen come up on the poop deck, where the men were gathered. The French consul was present and told the men again, as he had done the day before, that if they did not submit voluntarily to passing inspection and going on shore that forcible measures would be used. The men were very obstreperous, all talking at once, and stating that they did not desire to go ashore at

all; that they wanted to return to Martinique or die. They bared their breasts and told the Panama policemen to shoot; that they wanted to die for France. The consul told them that whatever measures of force were taken to land them would be with his approval, and that no claims resulting from these measures would be accepted from anyone, as they were trespassers on the vessel, and therefore violating the law and not entitled to protection as French subjects. Up to this time I thought that the show of an armed force would cause the men to submit, but it had no effect other than to excite them. A conference was then held between the captain of the vessel, the agent of the French company, the French consul, the captain of the Colon police force, myself, and others, and it was decided to take the men one by one and bring them down from the break of the poop. When the policemen marched up close to the negroes they voluntarily retreated as far as possible toward the stern of the vessel, and were therefore massed close together against the rail around the stern.

When this was done all of their personal baggage and empty bottles which they had were removed from the vessel and placed on the wharf. This was mainly to disarm them, as empty bottles could be used as weapons of offense or defense. After this was done, and the men were massed in the after part of the vessel, I suggested that a rope barrier be put across in front of them to avoid a rush when the policemen commenced to remove the men one by one. This was done, and the captain of the vessel directed the captain of the Colon police to take a certain negro indicated by him and put him ashore. The captain of the Colon police directed two of his policemen to lay hold of this negro and bring him off. When these two Colon policemen took hold of the man he held back and all the other negroes yelled, "Turn him loose," and other things which I did not understand, as they were speaking in French. Some of them drew knives, and all of them shouted that they were going to stay on the vessel or die.

The captain of the Colon police stated that he could not use more forcible measures without consulting Governor Melendez, of the Province of Colon. He withdrew his policemen a short distance and gave them orders to await his return before proceeding further. He then went to advise Governor Melendez of the fact. While he was gone I told the French consul and the captain of the vessel that up to this time I had been directing the measures to be carried out, but that now I would withdraw and have nothing more to do with the matter. I stated that I would give no more orders, and that I would not be responsible for any consequences or any other action taken; that the matter had changed its aspect, and that it was not now a question of refusing to submit to quarantine regulations, but a refusal on the part of the laborers to land at all. I told them that in this case it was not my province to force them to land. The French consul acknowledged the justice of this, and stated that he would be responsible, together with the agent of the French company and the captain of the vessel, for any further action on the part of the Colon policemen. The captain of the Colon police returned shortly, being accompanied by Governor Melendez and by the alcalde of Colon.

Another conference was held, and Governor Melendez made a speech to the laborers, telling them that as they had reached their destination it was necessary that they should leave the ship, and that no one had any right to remain aboard the ship against the consent of the owners or representatives of the owners of the ship, and that if they did not leave the vessel quietly he would give them two hours in which to make up their minds; that if they did not leave the vessel by 4 o'clock he would take such measures as would force them to leave the ship. After this speech by Governor Melendez all the negroes cried out that they would stay on board the vessel and go back to Martinique or die. Governor Melendez then sent a telegram to the secretary of foreign affairs for the Republic of Panama, advising him of the situation and, I suppose, requesting authority for further procedure in the matter.

Governor Melendez again returned to the vessel and asked me if I could get 25 Canal Zone policemen to come on board with their clubs, but without arms, to assist in driving the men from the vessel. Governor Melendez stated that he did not desire to create a disturbance, but that he would have his policemen on board to protect the Canal Zone policemen, and to quell any riot or disturbance which might arise when the laborers were forcibly removed from the vessel. This was a voluntary request on the part of Governor Melendez, and was not suggested to him, as far as I know, by anybody. I went to the Canal Zone police station at Cristobal and inquired for Lieutenant Angel. Sergeant Johnson, of the Zone police, told me that Lieutenant Angel was at Gorgona,

but that Lieutenant Ross, of the Canal Zone police, was in Colon; he thought at the Washington Hotel.

Sergeant and I went together in a coach to look for Lieutenant Ross, but did not find him then. I asked Sergeant Johnson if he felt that he had authority enough to bring the men under his command to the vessel, in compliance with the request of Governor Melendez. Sergeant Johnson stated that he felt authorized to do this, and I then requested him to return hereto with as many Zone policemen as he could muster, and to wait there on the wharf until he received further orders either from Lieutenant Ross or, if Lieutenant Ross could not be found, from Governor Melendez. Sergeant Johnson came to Pier 2 with a corporal and 15 Zone policemen armed only with their clubs. These men were drawn up on the wharf and awaited instructions. In the meantime Lieutenant Ross, of the Zone police, hearing of the matter, came on board and was advised in detail as to the situation. He held a conference with Governor Melendez, and sent a telegram to his chief stating that unless he was advised to the contrary by 4 o'clock p. m. he would render the assistance requested by Governor Melendez to remove these laborers from the French vessel *Versailles*.

During this interval numbers of people who spoke French advised the men to come off the vessel quietly before they got into trouble over the matter, but they persistently refused. Three men did voluntarily come out from the crowd of negroes, but they were hissed and jeered by their companions, who called them traitors to their country, and many other jibes were flung at them. The captain of the vessel appealed to them to permit their companions to come out from the crowd. They answered, "You have tied us up here with ropes, and we can not let them out." The captain of the vessel then ordered the rope barrier to be removed, and told the men they were free to go where they pleased, and also put food and wine on the wharf, and said that if any man there was hungry and said he had nothing to eat that there were three days' rations on the shore waiting for anyone who would pass out and get it. The men in the rear of the crowd still said that they were being hindered from coming out, and two or three of the Colon policemen tried to make a way for them to come out, when the negroes in the first row drew knives to attack the Colon policemen. The laborers were disarmed and the knives carried away by the Colon policemen.

At 4 o'clock Governor Melendez requested Lieutenant Ross to bring the Canal Zone policemen on board. This was done and the laborers were given a final opportunity to withdraw peaceably. They refused, and Governor Melendez directed the policemen to draw up on one side of the poop deck, and the Zone policemen were drawn up on the other side. Lieutenant Ross told the Zone policemen that the laborers were to be removed from the vessel, but that no violence was to be used except the force necessary to drag them along if they resisted. It was explained to all the policemen that no violent measures were to be taken except when necessary for self-defense. Governor Melendez had the captain of the Colon police make a similar statement to his men that nobody was to assault a negro or to in any way mistreat him unless if necessary to defend himself, but that the negroes were to be thrown off the vessel because they had refused for three days to voluntarily withdraw.

At 4 o'clock p. m. an order was given—I am not able to state whether by Governor Melendez or the captain of his police force, but it was given by some one in authority—to go up and get the first negro in the row and remove him. This was done, but when the policemen laid hold of this negro all the other negroes rose up yelling and gesticulating and demanding that he unhand the negro. As they resisted, a general mêlée ensued, in which it was necessary to use clubs and the butts of guns with which the Colon policemen were armed. The French consul was standing on the poop deck and witnessed the whole affair. Many of the negroes climbed over the rail, armed, to a projecting and shelving part of the ship outside of the rail and jumped overboard in order to escape. Many others, either through fright or desire to get away from the scourge adjacent, crossed the poop deck down on the main deck. The captain of the French steamer *Versailles* had his sailors mustered here in a solid body all the way across the vessel in order to prevent the men from running at large all over the steamer.

In this way they were herded together again below the break in the poop on the main deck. A gangway had been arranged prior to 4 o'clock at this point, so that the men might pass on shore. Doctors Moore and Darby were standing at this point ready to inspect those who cared to go ashore. I

joined Doctors Moore and Darby and we vaccinated those who came. The men who were herded on the main deck were very docile, and submitted without any objection, baring their arms for us to inspect for vaccination. The majority of the men were already protected by good vaccination scars or previous attacks of smallpox and were not revaccinated. When the negroes jumped overboard an order was given to the quarantine boat to shove off and rescue them. A boat was also put in the water from the French vessel, and some of the members of the English ship *Tripoli* and the crew of the German ship *Westphalia* also went to the rescue, as did some of the Colon policemen and other bystanders, and the men were pulled up on to the wharf or taken into small boats.

The labor agent of the Canal Commission was on hand and gave the men tickets bearing a number and showed them to the train which was waiting there. Before going they were given food and wine by the captain of the French vessel. A call was sent in for the ambulance from the Colon Hospital when the trouble first started, at 4 o'clock. The ambulance responded promptly with a physician who had surgical dressings, etc., with him and was prepared to render aid to anyone injured. None of the men were found to be sufficiently hurt to warrant their being sent to the hospital, and none could be found who desired to have their bruises or other slight wounds attended to.

No actual count of the men had been made, because when a count was attempted, as was done several times, the men dodged and moved around and got behind each other, some standing up and others lying down, so that it was absolutely impossible to count them accurately. It was stated that some were missing; some of the negroes were crying, stating that they could not find their brothers. That night at 7.30 two of the men were found clinging to the piles under pier No. 1; these men were brought on shore by an employee of the quarantine department and told that they were free to go where they pleased. He took them over, however, to the labor agent of the Canal Commission. So far as I know these two completed the list. The body of a drowned negro was found three days later, and it is presumed by some that he was one of those who jumped overboard.

In conclusion I wish to state that I think no more forcible measures were taken than were absolutely necessary. In fact, I think all the policemen concerned—especially those of the Colon force—deserve commendation for the way in which they acted. The Colon policemen had been on board for some hours without using any forcible measures, and during this time they had to submit to the taunts and jibes of the Martinique negroes, who called them cowards and stated that they were afraid to do anything. The Martinique negroes also drew knives on the Colon policemen and spat at them and in other ways tantalized them to such an extent that if they had not been well disciplined they would have taken the matter into their own hands and caused a riot. The Canal Zone policemen came on board only prior to the time when the order was given to take the men off the vessel, and therefore had not been provoked at all, and were merely obeying the orders of their superior officers.

The fact that no one was hurt to such an extent as to be necessary to send them to the hospital, or to receive medical or surgical attention, shows that the forcible measures taken were not severe. Those men who jumped overboard did so of their own volition; there was a projecting rail around the vessel, and they voluntarily climbed over it. Those who desired to come out of the crowd and voluntarily pass on shore were not molested; it was only those who resisted and attacked the policemen that were forcibly dealt with.

I wish further to invite attention to the fact that these men had been, since Friday noon (September 29) to Sunday (October 1) at 4 o'clock p. m., kindly treated, and implored by their own countrymen and by all interested to leave the vessel peaceably. They thoroughly understood their position, and had every opportunity to quietly pass ashore and receive the same treatment that every passenger arriving in Colon from any part of the world would receive.

During Sunday afternoon (October 1) the captain of the French vessel gave an opportunity to anybody who desired to return to Martinique to come out from the crowd and pay his passage money. They stated that they had no money, but would pay when they reached Martinique. This invitation of the captain gave them an opportunity to return to their country if they desired, but he could not be expected to carry them free of charge.

This is a complete history of the incident so far as I can recall it.

VICE-CONSULATE OF FRANCE,
Colon, October 7, 1905.

Sir: In answer to your request, made in the name of the governor of the Canal Zone, of a statement by me respecting the incident which occurred on Sunday last on occasion of mutineer passengers on board the French packet boat *Versailles*, I think I will serve best your designs by remitting you an official copy of the report I made on the subject to the Paris foreign office on the 2d instant.

Please find same herewith, together with copy of my answer to the alcalde of Colon respecting the drowned man found lately and who was supposed to be the dead body of one of the mutineers.

You will notice that every possible way of coming to an amicable settlement has been tried for three full days without any result, so that this consulate had to authorize and even to support the call of the steamship agent for the land intervention by force, and I informed the mutineers, who came from the French colony of Martinique, that owing to the position they had taken I would admit no complaint from any one of them, whatever might be the consequences of their actual behavior.

I avail myself with pleasure of this opportunity to express again my thanks for the assistance rendered on that occasion by the Zone police, who greatly contributed to the conclusion of the conflict without any loss of life or bloodshed.

Very respectfully,

G. BONHENRY,
French Consul.

Hon. J. M. KEEDY,
Prosecuting Attorney of the Canal Zone Government.

STATEMENT OF THE FRENCH CONSUL.

I have made an official report to my people in Paris, and I transmit herewith a copy. I do not think that the man who was drowned is a Martinique laborer. It was found that all the men had been accounted for. The number tallied, and I so reported it officially to my Government.

Question. In your report did you make mention of the Zone police?

Answer. I did. I said that we had applied for the help of the Zone police. Their conduct was very good. I was a witness to everything. The laborers would not go ashore. They had no money to pay the steamship company for staying on board and going back to Martinique, so the agent of the company compelled them to leave the ship. The local police said they were not strong enough. There were about 150 laborers, and they were armed with knives.

[Vice-consulate of France at Colon. Copy of letter addressed on October 2, 1905, by the vice-consul of France at Colon to the secretary of foreign affairs, Paris (American section).]

WASHINGTON.

I have the honor to confirm to your excellency my code telegram of this morning, which in substance says:

"About 140 Martinican laborers who on September 29 arrived on the Compagnie-Générale Transatlantique's steamer *Versailles* destined to work for the Canal Commission refused to land, under the pretext of having received information as to the unhappy fate awaiting them—an information entirely devoid of truth—and furthermore insisting on being immediately returned to Martinique. It was decided yesterday (Sunday), after many fruitless endeavors to arrive at an amicable understanding, to expel them, with my consent and in my presence, from the ship through the intervention of the Panaman and American police, as a consequence of which measure no deaths resulted, but many were more or less wounded."

The steamer *Versailles*, from St. Nazaire and way ports, really brought to Colon 664 laborers coming from Fort de France, Martinique, in charge of an agent for and at the expense of the Isthmian Canal Commission.

About 520 of these laborers landed without causing any difficulty, but the rest, of about 140, refused to come ashore under the following pretenses:

First. They alleged that the vaccination to which the American authorities subjected them in accordance with the regulations governing immigration was "for the purpose of branding them with an inextinguishable mark, thereby forever preventing their leaving the Isthmus."

Second. And above all they claimed that some of their countrymen who had come alongside the steamer on their arrival had described to them the life in the workshops of the canal, especially as regards food, habitation, and medical assistance, in the darkest of colors.

Efforts were made during the whole day of the 29th by Messrs. Lelanchon, M. Leca, and M. Raven, commander of the ship, chief of the maritime postal service, and agent of the Compagnie-Générale Transatlantique, respectively, in order named, as also by the other officers of the ship, to convince the stubborn passengers of the groundlessness of their allegations and to induce them to land. These latter expressed their desire of interviewing the French vice-consul.

I therefore, at the request of Commander Lelanchon, went on board on the morning of the 29th. I listened to the claims of the Martinicans—claims which I endeavored to refute. I told them in my reports to the local government of Fort de France, and at its request I had kept it fully advised as to the conditions existing on the Isthmus in regard to laborers, but that I had never intimated the existence of conditions such as these people seemed to anticipate, and could not have done so without perversion of the actual facts—facts which, on the other hand, I thought it my duty to fully explain to Mr. Bonhoure. But it was plain that these people did not intend to listen to reason, but had obstinately made up their minds not to leave the ship. In view of this I called their attention to the fact that they had no right to remain on board after duly arriving at their destination, and that the agent of the Compagnie-Générale Transatlantique would apply to the police to expel them from the ship. To this they replied that they wanted to return to Martinique and that "the governor of the colony and the president of the general council would pay their return fares on their arrival at Fort de France."

In vain did I explain to them that Mr. Bonhoure had written me that he had advised them that it was at their own expense and risk that they came to the Isthmus under contract, and that the administration of the colony could in no manner undertake to return them to their country. (In the communication from this vice-consulate, dated August 23, addressed to the Department, this matter has been fully dealt with. I attach to this copy of a communication from Mr. Bonhoure, dated August 23, on the same subject.)

The situation underwent no change during the balance of that day. In accordance with instructions from the agents of the Isthmian Canal Commission no food was supplied to these passengers during the days of the 29th and 30th of September. Nevertheless, after conferring with me, Commander Lelanchon, for humanity's sake, decided to furnish them with a meal on the evening of the 30th. Neither hunger nor persuasion had any effect on these people, who declared that "they were ready to die on board of the French steamer before marching to martyrdom, which they would do by voluntarily coming on shore."

On the morning of October 1 I was informed by the agent of the Compagnie Générale Transatlantique that he was about to ask for the assistance of the police to expel the Martinicans from the ship, and he asked me to authorize the police to board the steamer *Versailles*. I acceded to Mr. Raven's request, and personally accompanied him to the office of the chief of police. This latter advised the port captain and the governor of the province, Mr. Porfirio Melendez, of the matter. Mr. Melendez joined us on board the steamer. He on his part tried to make the mutineers desist from their purpose. But in vain. The only answer he obtained were angry growls and threats. Mr. Melendez, however, not wishing to take vigorous measures without first receiving superior orders, and moreover considering the police force at his command inadequate, sent a telegram to the President of the Republic of Panama, requesting authorization to ask for the cooperation of the American Zone police. In the meantime a detachment of American police was gotten ready and the mutineers notified that they were given just two hours to decide.

During this time of grace Mr. Lelanchon, the commander, Mr. Leca, the "contrôleur," and myself made new efforts to conciliate these people, and some of them showed a disposition to give in, but the instigators prevented them therefrom. Only three of them left the group that had gathered on the forward deck of the steamer.

At 4.15 p. m. President Amadore's answer was received authorizing the intervention of the Americans.

After a last but fruitless effort to arrive at an amicable arrangement, the two police detachments, American and Panaman, proceeded to the forcible ejection of the mutineers. Orders had been given that the use of firearms or bayonets should only be resorted to in case of extreme necessity. It did not become necessary to use anything but clubs, and these were liberally applied to the heads and shoulders of the rioters. About 50 of these latter in order to escape the blows jumped overboard, but, of course, were immediately rescued by the boats of the *Versailles*, under command of Lieutenant Simon, who particularly distinguished himself in this work of rescue. Within a few short moments the police became masters of the situation.

Among the police, the Panamanians, who naturally are in their majority of a sanguinary temperament, and whose nerves had been subjected to great strain by having been stationed all day long before the mob which insulted them and threatened them with knives, were held in check, thanks to the presence of the governor, the commander of the ship, the controleur, the agent of the Compagnie-Générale Transatlantique, and the undersigned, who did all in their power to repress any unnecessary violence. Fortunately no one was seriously wounded, and the injury received in the neck by one of the Martinicans is not believed to be fatal.

The Martinicans once ashore and subdued, were vaccinated, and after being fed were immediately taken to the Canal Zone. An American surgeon accompanied them for the purpose of giving the wounded first aid.

I have expressed to Governor Melendez and the chief of the American police the great satisfaction I have felt in seeing the conflict with the rioters ended without the shedding of blood. I felt it also incumbent upon me to praise the patient and humane conduct of Commander Lelanchon, that of his officers, as also that of Mr. Leca, controleur, which these gentlemen observed toward the passengers—a conduct which I shall feel constrained to bring to the notice of their superiors.

With pleasure I testify to the many and repeated efforts of these gentlemen to overcome the stubbornness of the Martinicans by appealing to their self-respect and to their dignity and patriotism—efforts that were only unsuccessful because of the malign influence of a dozen agitators, whom to separate from the rest of the people it had unfortunately been impossible.

I consider that most especially high official recognition is due Commander Lelanchon, already a Knight of the Legion of Honor, for his conduct during these three trying days, and I earnestly solicit for him the reward for his noble conduct, which even the Martinicans acknowledged in my presence.

I must also make mention in special manner of Mr. Leca, maritime postal agent, who was on board the *Versailles*. At the time when I personally endeavored to make a last effort at reconciliation of the rioters, Mr. Leca pulled me back, earnestly imploring me to retire, as I was in imminent danger, and, in fact, one of the Martinicans near me had pulled out of his belt a long knife and assumed a threatening attitude.

It was evident that although my object was only to arrive at an amicable understanding, it was impossible for me to remain in the midst of those frenzied people without incurring great risk.

I hastened to thank Mr. Leca, but I would feel grateful if the department would bring the fact just stated to the knowledge of the under secretary of the post-office department, so that Mr. Leca may receive, in addition to my gratitude, an official recognition of his conduct in this matter, as before stated, deserving great praise.

G. BONHENRY.

I certify that the foregoing is a true copy of the original.

G. BONHENRY,
Vice-Consul of France.

VICE-CONSULATE OF THE REPUBLIC OF FRANCE AT COLON, ISTHMUS OF PANAMA.

[Copy of letter addressed under date of October 4, 1905, by the French vice-consul at Colon to the city mayor.]

SIR: I have the honor to acknowledge receipt of your esteemed communication of yesterday's date, bearing No. 19, regarding the body of a drowned man which was found between piers Nos. 3 and 4, supposed to be that of one of the

Martiniquans who, on the afternoon of the 1st instant, jumped overboard of the French steamer.

According to authentic documents before me, I am satisfied that of the 661 laborers brought here by the steamer *Versailles* from Port de France for the Isthmian Canal Commission all have been received and completely accounted for by the chief of the "labor department" at Cristobal.

For this reason the supposition that the drowned man referred to should have been one of the aforesaid Martiniquans is inadmissible.

I am, sir, your most obedient servant,

A certified copy of the original.

Colon, October 7, 1905.

(Signed)

G. BONHENRY,
Vice-Consul of France.

G. BONHENRY,
Vice-Consul of France.

EXHIBIT F.

PACIFIC MAIL HOUSE,
Colon, November 3, 1905.

Hon. W. H. TAFT,
Secretary of War, United States of America.

SIR: During your stay on the Isthmus permit me most respectfully to request that you will grant me half an hour of your valuable time for the purpose of showing you the back swamp of Colon, where a large portion of the colored population have their homes.

I am, sir, your most obedient servant,

TRACY ROBINSON.

ANCON, CANAL ZONE,
November 5, 1905.

MY DEAR SIR: I am in receipt of your letter of November 3, in which you request that I give you half an hour to show me the back swamp of Colon, where a large portion of the colored population have their houses. I shall go to Colon with Engineer Stevens, and shall take especial care to look into this matter. I assume from your letter that it is the basis of some complaint that action has not been more promptly taken with reference to Colon. I am quite familiar with the difficulties which the Commission have to deal with in the matter of improving conditions in Colon. One of these is the doubt as to the type of the canal which is to be constructed. If the entrance is to continue at Cristobal, then improvements in Colon should take certain form; but if it is to be moved to the mouth of the Mindi, then it is doubtful if Colon ought to be improved at all or not, and whether the town ought not to be moved to the mouth of the canal. For this reason I do not think it worth while to meet you.

I have talked with Mr. Stevens, and know much better than you can how earnest his desire to facilitate the work of making Colon habitable and healthful, just as he and his colleagues are now doing so much for the health and sanitation of Panama and all the other towns of the Zone. More than this, a board of competent engineers, appointed and especially directed to report a plan for the improvement of Colon, have already reported a measure of temporary relief to bridge over the time which must elapse before the question of the terminus of the canal has been finally settled. The report of the committee has been approved and the work as to the temporary measures has already been begun. For this reason, and because of the very short time which I have at my disposal, I must ask you to excuse me from the request for a personal interview.

Very sincerely, yours,

WM. H. TAFT.

TRACY ROBINSON, Esq.,
Pacific Mail House, Colon, Panama.

EXHIBIT G.

Upon inquiry made by cable by Mr. Stevens, the chief engineer, now in Washington, the following answer was received:

"PANAMA, January 8, 1906.

"STEVENS, Washington:

*"Trent docked 10 a. m., November 30; sailed 2.10 p. m. December 1.
"BIERD."*

[Cablegram.]

WASHINGTON, January 6, 1906.

MAGOON, Ancon:

Poultney Bigelow publishes article bitterly attacking Canal Commission for failure to improve Colon; failure of sewer system in Panama; lack of water supply in Colon; miserable treatment of negroes generally, and especially those living in Colon, relying on statements of Tracy Robinson and John Lundie. How long was Bigelow on the Isthmus, and what do you know of his visit?

TAFT.

[Cablegram.]

WASHINGTON, January 6, 1906.

MAGOON, Ancon:

Send me at once, as far as you may be able to, such statistics as you have as to the mortality and sickness per thousand in Colon, as compared with Panama; how many cases of yellow fever there were at Colon per thousand, as compared with those at Panama.

TAFT.

PANAMA, January 8, 1906.

TAFT, Washington:

Poultney Bigelow arrived at Colon on the evening of November 29 or the morning of November 30 from Europe. He came to Panama November 30, Thanksgiving Day; called on me; I was out. He returned to Colon in evening; spent morning of December 1 in Colon with Tracy Robinson; sailed for New York on the afternoon of December 1. Have no further information respecting visit. Lin-

nell, engineer in charge, states last week Robinson accompanied him to new reservoir at Mount Hope for Colon and Cristobal waterworks; told Linnell he had not seen work before and was greatly surprised and gratified at progress made; two temporary reservoirs for Colon and Cristobal water supply were completed on November 1, the other latter part of December. The total capacity is 80,000,000 gallons; amply sufficient for present dry season; 7,000 feet permanent feed mains already laid; remaining 9,000 feet now being laid at rate of four to five hundred feet daily; distribution system installed by French for supplying Cristobal connected with permanent feed mains on December 20; house connection made all buildings at Cristobal occupied by white employees and ten distribution hydrants installed for laborers' quarters; six tanks, with a total capacity of 65,000 gallons, held in reserve at Cristobal in case of accident; complete permanent distribution system will be completed by May 1; present Panama Railroad water system for Colon will be connected with permanent feed mains before January 15, and free public distribution stations will be opened then, supplying all of Colon. Colon people now securing water from tanks as in years past, and from public hydrants in Cristobal; permanent water mains, including fire service, will be completed on principal streets in Colon by end of dry season, April 15, supplying the entire city.

At present no scarcity in water in Colon; permanent reservoir capacity, 500,000,000 gallons. There are under construction two permanent standpipes, 400,000 and 500,000 gallons capacity, under contract to be completed by April 1; complete domestic sewer system is already installed for all houses occupied by white employees at Cristobal; surface drainage will be completed by end of present week; 4,700 feet of concrete drains laid; streets in splendid condition in Colon; since October 17 the two principal lengthwise streets and three cross streets were raised and rebuilt and two lengthwise streets and six cross streets ditched and graded ready for top dressing; 1,043 cubic yards of gravel used up to date; 5,041 feet of concrete gutters built; the work of raising and rebuilding all streets in inhabited portion of town will be completed by end of dry season; one block of drainage canal bisecting town constructed; work progressing now at rate of 30 feet per day. Will probably be completed by end of dry season. Impracticable to undertake permanent domestic sewer system for Colon until commencement of permanent improvement of city, depending on determination of the plan of constructing canal. See the report of the committee for improvement of Colon on file in the Washington office of the Commission. From May, 1904, to December, 1905, inclusive, there were 125 cases of yellow fever in Panama, 3.33 cases per thousand inhabitants per year; for the same period 61 cases in Colon, 3.38 cases per thousand. From December, 1904, to November, 1905, inclusive, there were 2,210 deaths in Panama, 55.84 per thousand inhabitants per annum; for the same period in Colon there were 529 deaths, 44 per thousand death rate among our employees on the Isthmus; for the year ending October 31, 24.30 per thousand. See monthly reports of the health department on file at the Washington office of the Commission; also my annual report for details as to quarters for negro laborers in Colon being overcrowded; model quarters with concrete floors and shower baths,

etc., are rapidly approaching completion. Lundie's criticism of Panama based on conjecture as to inability of system to handle storm water when streets are paved and brought to grade. Storm water will be handled largely on the street surface. Lundie favored installation of two systems, one domestic, one storm water. A system large enough to handle torrential rains would become foul in dry season. A domestic sewer system excluding surface water would depend on house consumption of water to flush, and our engineers thought it best to combine both systems, using moderate-size pipe. Carlton E. Davis, engineer, is preparing plan and has partially constructed work. He is now connected with New York City water-works. He can advise fully; also see Stevens.

MAGOON.

[Mr. Big
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[FROM THE INDEPENDENT OF JANUARY 4, 1906.]

OUR MISMANAGEMENT AT PANAMA.

By POULTNEY BIGELOW, M. A.

[Mr. Bigelow has spent many years in the study of colored races and labor conditions in tropical countries. In 1896 he went to South Africa for the purpose of studying economic conditions in Natal, Mozambique, Transvaal, Basuto, and Cape Colony. He also made analogous studies in northern Africa. He has three times been to the Far East for the study of native questions, and has published accounts of colonial methods in the Dutch East Indies, the Malay States, the Philippines, Borneo, China, Japan, Samoa, Australia, Sandwich Islands, and the German colonies in the South Seas, as his "Children of the Nations" and other volumes attest. The negro labor question he has studied not only in Africa but in South America and every island of the West Indies, from which the present laborers are recruited. He has also studied our own negro in each of our Gulf States.—EDITOR.]

At the close of this year, 1905, it may prove useful to look back over the eighteen months of our activity; to pause for a moment and take an observation from a standpoint which is neither that of an office-holder nor of an office seeker, much less that of a disappointed contractor or invalidated laborer.

I have had abundant opportunity to hear the views of opposing witnesses, but I have also been in a position to examine on the spot many things which have so far been conspicuous by their absence in so-called "official" and authoritative reports.

The strictly engineering or technical difficulties in the way of building the canal have vanished, if they ever existed. These difficulties are magnified now and then at the instigation of powers who have other interests to serve. The canal should prove a boon to the railways of this country no less than to the community at large, and yet many railways are credited with systematic obstruction to the waterway for reasons analogous to those which make the proprietor of a livery stable say uncomplimentary things about chauffeurs.

We must also make allowance for a generous amount of professional jealousy which induces one engineer to speak slightly of a competing colleague.

The Culebra cut and the even more dreaded Chagres River have nothing intrinsically discouraging to such of our many practical engineers as have had to do with analogous work in our own country under conditions somewhat, but not wholly, dissimilar from those prevailing to-day at Panama. To-day the canal is a feasible project, provided we have the three conditions—money, labor, administration.

We have, fortunately for us, money enough.

There is plenty of labor to be had for the asking.

The administration that is reflected in our great railways and that challenges the admiration of the world for economy and efficiency is on all sides of us waiting for a call from Washington.

On November 9 of this year the chairman of the Isthmian Canal Commission, Mr. Shonts, made a speech, which was reported in full

in the chief paper of Panama, and which bore all the distinguishing marks of a statement prepared by official authority for the purpose of warming the enthusiasm of otherwise luke-warm shareholders.

This gentleman, along with many in similar positions, holds up to public scorn those who do not see things through his official glasses. This method has its merit up to a certain point but not beyond.

Certain officials treat our serious interests in a pleasant, airy manner, assuring us one day that the Filipinos are our most loyal and happy subjects; on the next day that our military organization is the most perfect in the world; on the next that nothing can surpass the splendid work done on the Isthmus of Panama by self-sacrificing politicians--and other engineers.

This is not saying that our luminaries round the White House would wittingly do a wrong.

No!

But they have generated an atmosphere in which the Ten Commandments walk zigzag--where plasticity of the moral vertebrae seems to suggest bowing acquaintance with kindred chronic complaints at present affecting some of my Christian fellow-citizens who are missionaries of life insurance corporations.

In the famous speech of Chairman Shonts is a strange slur upon our colored fellow-citizens: "Unless a much greater efficiency can be developed than can be developed at present we shall have to look elsewhere for our labor!"

Does Mr. Shonts know that all the labor at the Isthmus is negro? Must we believe that negro labor is a failure and in the one spot of all others where it should meet with the highest regard?

On landing at Colon I started for a stroll of inquiry and soon fell into conversation with a splendid specimen of manhood, a negro such as would have been recruited with pride into the Tenth United States Cavalry. He said that he was trying to get back to Jamaica. He was a sick man, could walk with difficulty, his system weakened by malarious fever.

Naturally I expressed surprise that he should be returning to Jamaica when the cry of Colon was for negro labor. He said he came here for work, but had been deceived--he found the place unfit to live in; he found that the wages which had been promised to him, \$1.50 in gold, were paid in silver equal to \$0.75; he found that these wages were not paid punctually, but after two weeks, and sometimes more.

He was a well-dressed, self-respecting negro, and his words would have impressed Mr. Taft could he have spared time for independent inquiry.

I asked him why he did not sail on the morrow rather than wait five days for a Leyland steamer; he answered me that the next steamer was already crowded with "deckers," and he could not afford any but a deck passage, having used up all his money by reason of his fever. And indeed the Jamaica negro spoke the truth--the steamer which sailed next day took away 400 negroes, all returning to Jamaica in disgust.

Not long after this I was in Jamaica and spoke on this subject not only with the governor, Sir Alexander Swettenham, but also with the chief justice, Sir Fielding Clarke, both men of the first rank in their respective spheres and both competent witnesses. They both confirmed what I had heard from dozens on the Isthmus, and what is

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denied by official authority in Washington, namely, that the negroes are returning from the canal in portentous numbers, in spite of the fact that nominal wages there are twice or three times higher than in the adjacent British islands. But the negro is a man who thinks more of fair treatment than wages.

The story of Jamaica I heard on good authority in Barbados and Trinidad, and the negroes with whom I talked who hailed from Martinique or Guadeloupe spoke in the same strain. The mere fact that my own ship from Colon carried 400 negroes to Jamaica, and that the ship which followed four days afterwards carried an equal number, and that each ship leaving the Canal Zone has been freighted with negroes abandoning high wages—these facts alone suggest that some of my political friends have signed reports mechanically.

The governor of Jamaica, who is personally familiar with labor conditions in the Far East no less than with those of the West Indies, was persuaded that the negroes on the Isthmus were not honestly or humanely treated, and that there should be some special agent whose duty it should be to see that the official promises of the United States Government were respected.

Last week, for instance, a negro workman applied for his pay. He had finished his week's work and wanted to get away on the steamer which was about to sail. This was at Carozal.

The negro waited all day Sunday, and at the close of the day was told to come again on the morrow. He came again on Monday and waited until 3 o'clock in the afternoon, thus losing a full day's work. The foreman again put him off—said he was busy—told him to come again next day.

The negro, whose steamer would not wait, became impatient and begged the white man to give him his money and let him go. The foreman met this appeal by ordering him off the premises and addressing him as an "impertinent, stinking black ——."

The negro, who was from the self-governing island of Barbados, felt indignant at this, and very properly let fly his fist against the front of the foreman, and then, knowing the nature of Panama law, took to his heels.

He was captured, hauled before an American judge, and sent to jail for ten days. The white foreman was not even reprimanded. This story was vouched to me by a leading merchant of Colon, a Scotchman, who had verified the details.

Another white merchant, whom I had known fifteen years ago at St. Kitts, in the Windward Islands, told me that only a few days prior to my arrival a white man came up to a negro and demanded of him the loan of the horse he was leading.

The negro refused on the ground that his master had ordered him to let no one have it. The white man sought to intimidate him. The negro remained true to his trust. The white man then attacked the negro with his fists. The negro, in self-defense, pulled a revolver and shot the assailant. The negro was promptly convicted of manslaughter—the white man as promptly declared innocent.

My negro friend depressed me.

I reminded him that Mr. Taft had given a very pleasing picture of conditions down here—and, indeed, from where we stood talking, I pointed out to him a clean, smooth street running parallel with the rail-

way, and on this street a handsome ambulance pulled by two costly mules and driven by a pompous negro.

I naturally felt proud at this evidence of municipal enterprise, and pointed this out to my malarious mentor.

"Fore God, sir, ah'm tellin' you de troof!" said the negro, with tears in his voice. "Mr. Taft an' all dose big people dey didn't see real things—dey went to dances an' talked with politicians. Dey don't know how de workman has to live!"

And so I determined to act on this hint, and for this purpose hunted up an American merchant, who has lived in Colon since 1857, who has been connected with the original railway and with every subsequent great industrial movement on the Isthmus.

I had many letters to official people. I had none to him. As a rule, I find official people dangerous guides, unless their statements are rectified by such as have no axes to grind.

Mr. Robinson kindly laid aside his work for the day, and at my request conducted me through the whole of Colon for the purpose of finding an explanation for the strange exodus from what should be a labor paradise.

We passed along the front street—the show street—the only street. We went to the Central Market, which covers a block, around the four sides of which I found merely pools of stagnant water—"handy for drowning babies, as a negro foreman playfully remarked. Every whiff of air blew poison into the public market; the strings of meat on the butcher stalls hung unprotected against flies, dust, and the plentiful body of germs which were breeding luxuriantly in the hot, moist air.

While a dozen or more amateur physicians were gunning after mosquitoes, here in the Central Market was a gathering of all that was vile in the way of microbial propagation. The market testified to the pooriness of the food supply, to the absence of roads or farms in the neighborhood; in short, to the indifference of the Government upon a matter of prime necessity—food for the laborer.

One glance at the Central Market is enough to account for the chronic state of pest which characterizes this city—in spite of all official bulletins to the contrary.

"Did Mr. Taft inspect the labor quarters?" I asked of Mr. Robinson.

"No," answered my venerable friend. "I prayed him to let me show him the real state of things on the Isthmus, but he declined. He professed to know all about it from 'official' sources!"

"Mr. Taft spent five days down here," said an eminent engineer to me. "In that time he attended three dances and a succession of social functions, but he had no time to look into the condition of the laboring man."

Mr. Taft, it seems, and most of the other high officials who had run down at Government expense, made themselves ridiculous in the eyes of the residents by exhibiting a panicky dread of disease in a place where thousands of their fellow-men were exposing themselves freely.

The natural thought in the minds of many was: "If this place is too rotten for such as Mr. Taft, why does not he order it immediately drained and cleaned? Is his life so much more precious than ours that he is hauled out to sea every evening on board a Government transport while we, who have also come down here for the United States Government, are condemned to sleep in a poisonous swamp?"

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For the benefit of Mr. Taft I made a house-to-house visitation throughout the best part of a blazing hot day. Nor did I permit myself to be "steered." Wherever I chose to stop haphazard I did so, and entered houses and inquired of the tenants how they fared. So soon as they saw Mr. Robinson they treated me as a friend.

To name all those with whom I talked along the streets of Colon would be impossible. A hundred or more huts did I enter, a hundred or more back yards and latrines did I inspect, and these in every street excepting the one show front street, where the costly ambulance paraded up and down.

Where shall I begin?

There is Madame Thérèse, for instance. Her premises face the Episcopal church and the new big hospital, of which so much praise is sung. She struck me by her personal neatness, and I asked to inspect her home. She had two rooms, each exquisitely clean and tidy. Her bed linen was snow white; her ornaments well rubbed. She was much depressed, and wanted to get back to her native island. The street was a pool of water in front of her—the water lay green and slimy under the house. I went to the back of the house, and saw a vista of swamp broken only by the fences and the latrines of the adjacent owners.

The word "house" is misleading. These shelters are houses by courtesy only—they would disgrace the most unworthy sections of shanty town. The dwelling is but a shelter of unpainted boards—a floor, a roof, four wooden unpainted walls—no kitchen, no plumbing, no conveniences of any kind. At the back of the house is a swamp whose bottom we know not. Out in this swamp is a quasi sentry box, which is inaccessible by reason of the green slime, from out of which protrudes now and then some coarse weed or piece of broken furniture.

Of course I insisted upon inspecting the latrine, and planks were brought and propped up so that I could reach it without wading through the filth.

My experience of life in the slums of Chicago, of Canton, of San Francisco—nothing prepared me for the smell of Colon. The real latrine was obviously the swamp immediately under the flooring of the bedroom—not that the inhabitants were indifferent, but simply because the latrine in the yard was inaccessible, save under the greatest difficulties, notably in time of rains.

Madame Thérèse told me that in the daytime the stench was tolerable, but at night when the breeze blew across the poisoned waters it made her head ache and she could not sleep well. She said she had appealed over and over again to the board of health, but they did nothing to relieve her distress.

Maybe her case is singular, you say. On the contrary, she had at least a board walk in front of her and was close to the front street, where the ambulance parades all day.

One house which I entered had an upper story—eight rooms to the house—each room representing one family, each family representing as many as could crowd in. The swamp stretched underneath as well as around the premises. Little children were crawling around the crazy board walks or gangplanks in imminent danger of falling off into the poisonous water. Some were cooking on open fires outside the house; all were personally clean and the rooms were invariably tidy.

I went up the outer stairway, a rickety set of steps, to the upper story. The first room I entered there greeted me a negro broken with fever. His wife was tending him. They were from Jamaica. They have four children and pay \$12 silver per month. For three weeks he has been unable to work, and looked appealingly when referring to his yearning to be home once more.

"But why don't you go to the hospital and be treated free?"

"I did try, sir," said he, dejectedly, "but the doctor just talked harsh to me, and gave me some medicine and told me to go 'way!"

The wife told me that they had been here three months, but in that time four people had been carried out from that house dead from fever. And when I looked at the swamp in which they were living I wondered at the favorable death rate.

Mr. Taft would have felt his warm heart ache had he been with me to see the needless suffering to which these confiding negroes were subjected, driven into a swamp because the Government gave them no ground on which to pitch a tent, and there exploited by landlords because even this swamp became a prime necessity.

In one back yard I noted a sturdy and active negro woman trying to hang out the linen she had been washing. The only water she could procure was the drip from the roof, and therefore she had to be painfully economical, not to say dangerously unsanitary.

But to dry this wash she had no ground. She stepped with catlike agility from one clump of mud to another, and spread the towels and sheets and underwear with marvelous dexterity across some odds and ends of swamp shrubbery, sticks or bits of abandoned utensils which here and there cropped up out of the ooze. And these clothes belonged to white engineers of Colon!

The laundress must be careful how she complains, for otherwise a young political inspector of medical things will come round and order her barrels of rain water poured out by way of official reminder. Officialism, when not strictly controlled, manifests itself on like lines the world over, whether in China or Russia, Caracas or Colon.

But that is a digression which I reserve for another occasion.

If Colon were in the Berkshire Hills instead of near the equator it would still be unhealthy. Here, however, at the Isthmus, where we are officially invited to admire the so-called sanitary system, I noted such criminal neglect as could not be matched to-day in any city of Italy or Spain—not even in Turkey.

The lowest rents I found to be \$6 a month, silver, these being single rooms almost inaccessible by reason of the swamp. Where the room was fairly accessible by means of rickety boards propped up on stakes the price went up to \$12 a month. Where a street was convenient, where people could make their way along a safe board walk, the price went up to \$20. But the moment you applied for a single room where the conditions of life were half-way normal, or say up to the standard of a slum in any American manufacturing town, then the price was from \$25 up (silver).

Throughout my pestiferous excursion up and down this filthy city I could find not a single man or woman who had not suffered or was not suffering from fever of some kind; not a single one who did not want to go home, but was prevented by the want of money.

Is there a good reason why we should not have made a camp for the negro laborers who are doing a great service to the United States by offering their labor?

There are plenty of fine, open, healthy meadows, not far from the railway track, where ten or fifty thousand negroes could be quartered under canvas and where they could at least be kept in physical health pending their assignment to work elsewhere.

One street running from the water front at right angles into the swamp town had an awning about a quarter of a mile long stretched over a wholly useless gutter in the middle of the marsh.

I asked what the awning was for.

Answer—To protect the workmen from the sun!

No one could invent such midsummer madness as this.

Close to this endless awning I saw a monster steam dredge stuck in a swamp, which at that point was officially labeled "street."

I made inquiries in several quarters, of an engineer among others, but could discover nothing save that it had been hauled to this place three months ago and left there with the avowed purpose of digging a canal along this street.

The street immediately beyond this one was much wider and in every way better adapted to a canal; but for some mysterious reason the dredge was here, lying idle, and slowly sinking out of sight on what is officially called a thoroughfare of Colon.

At present writing there is not a single drainage canal made at Colon—the very first need of a swampy community. The dredge which I saw stuck in the mud was also turned the wrong way; but that is a detail, save as it indicates the presence of political or amateur engineers.

A first-class machine man (white) came here ten days ago and was put to work at \$100 (gold) a month in the Culebra cut. Soon afterwards a flabby young man was brought up to him and introduced as his future chief! It soon transpired that said flabby young man had never had any practical experience whatever—had come down here with political protection and had been given a job as engineering inspector at a salary \$50 larger than that of the thoroughly trained man first mentioned.

"But does this young gentleman know nothing of the job?" asked my friend in amazement.

"Well, no. We expect you will teach him!" was the answer of the engineering chief.

My friend laid down his tools and handed in his resignation, and is now working for a private company at double his previous salary.

One day I stopped to chat with a well-dressed, intelligent, and energetic negro who was managing a gang of fellow-Africans in a street near the American post-office. They were digging up the street. He was encouraging his men, and they answered him cheerily. They obviously liked him, and worked well under him. He wore a clean collar, a black derby hat, and a good suit of clothes—an educated and prosperous sample of his race. He told me that he had been here seven months from Jamaica, and was doing his best to deserve promotion. The cost of living was high and the wages not as much as had been originally promised, but his main grievance was that as a man of color

he received no encouragement for his work; no one seemed to care whether he got good work out of his men or not—all the white men about him were trying to see how little they could do, each for himself.

Next day I came to the same place for another chat. He was not there. A white man wanted his job and had got it. That white man was sitting on the curbstone, looking more like a worthless tramp than a foreman. His head had sunk between his knees and he was in a comfortable doze. The gang of negroes had also lost all interest in their work and were listlessly seeking to emulate the example of their so-called foreman.

At present the work at Panama resembles an army of recruits without any commander, or rather with a dozen ones, who spend their time in commanding and countermanding. Our Panama patriots are kept busy in finding occupation for young men with political affiliations, who amuse themselves by playing the doctor and the engineer, the foreman, the inspector, the general boss.

While we in Colon are compelled to live in a swamp, each incoming vessel is boarded by two young medical men who do their best to delay commercial intercourse by insisting upon a series of alleged tests regarding the health of passengers, oblivious of the patent fact that anyone arriving in good health is pretty sure to be down with some form of disease within a few hours, thanks to local conditions.

Shortly before my arrival there entered Colon a shipload of colored passengers from the French West Indies. They were forbidden to land unless vaccinated. The doctors would not permit their being vaccinated otherwise than on their arms, where the scar would interfere with their manual labor for a week or more. These negroes therefore refused to land.

They were still further discouraged regarding Panama when they were told that they would have to live in a swamp and that their wages would be paid not in gold but in silver. The agents of the company refused to take them back—ordered them to leave the ship. They protested that they had been coaxed to this port under false pretenses and therefore insisted upon their right to go back. The French consul came at the instance of the company, and also failed in his efforts to induce his fellow Frenchmen to disembark into this unbiblical pool. The company cut off their supply of food for twelve hours. But even this did not break the spirit of these citizens of the French Republic. Finally brute force was invoked. The police was turned in on them with clubs. Many were maimed, and finally all were turned adrift into the swamp, a fate little better than death.

This outrage upon human nature has made a deep impression throughout the West Indies.

At Corozal, 3 miles from Panama, I was taken by an official of the canal company to see a magnificent hotel erected by our Government. It was a splendid edifice and cost, of course, a corresponding sum of money. But it was deserted.

Our political architect, builder, sanitary inspector, and engineer had placed this hotel in a depression of land which became a lake, or, rather, vast hog wallow when it rained, and consequently it was a breeding ground for pestilence.

Why did he build here? This land has been known intimately for at least fifty years. The Isthmus has been a highway of travel since the days of Charles V.

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Yet in this year 1905 an engineer representing the most practical nation on earth locates in a well-known swamp a hotel intended to protect our employees from the alleged deadly climate of Colon or Panama.

This is merely a sample. At Panama I had a talk with an American engineer representing the most important electric company in America. He had been many months on the Isthmus.

He told me that the big new dredges at the Culebra Cut did not do 20 per cent of the work originally promised, and that when he was up there he found that one of them had been capsized, owing to the rain washing the soil from under it, and that in general the situation there was one to make an honest mechanic want to find a job somewhere else.

Mr. Taft refused this engineer's request for an interview, for reasons analogous to those which permitted him to rebuff Mr. Tracey Robinson's kindly meant offer.

But as practical men of affairs we have a right to ask:

What good does it do to send commission after commission to make a picnic run to Panama and come home with no news save what is told to them by their own officials?

We have had canal boards ad nauseam. We have had commission after commission tripping to the Isthmus at the expense of the nation—and what does it all amount to, stripped of partisan coloring? Less than nothing.

In October, 1905, a great party of "specialists" came to the Isthmus with Chairman Shonts and did pretty much what the Taft party repeated later.

They were met at the wharf by political deputations and a special train, with disinfectants, strong drinks, and mosquito nets. Then they ran across the 50 miles of railway and back.

Each of the short five days was occupied by some short, easy railway excursion under the most elaborate precautions lest an insect more or less should jeopardize the success of their inexpensive outing. On October 5 the run was to the site of the Bohio Dam, and such was the scare in the party that only one man ventured to the edge of the water. Next day another railway run was made to the site of the proposed Gamboa dam, under similar precautions.

Each night they were all carefully towed out to sea beyond the range of Colon smells, alligators, mosquitoes, and other savage beasts, and slept the sleep of those who sleep while others scratch. Next day (October 7) the visit was to the famous and much exaggerated Culebra cut, where many of the party declined to enter for fear of catching some disease germ. Sunday was officially labeled a day of rest, if we may speak of rest in the case of those who are weary of sitting down.

On the 9th there was an exchange of official visits, cigars, and drinks at Panama. Next day the illustrious commission held a farewell reception on board the Government yacht, and on the day following, October 11, they headed for home, having seen the "official" Isthmus, and having carefully avoided the swamp in which the majority of Colon labor is to-day forced to congregate.

And yet this eminent chairman made a speech in Washington wherein he said (November 9): "If we have not made the dirt fly we have made the filth fly!" adding this cruel joke: "If sickness could ever be regarded as a boon, it may be thought so in Colon!"

Mr. Taft promised officially that by December 1 Colon would have a splendid water supply. There is to-day no water supply in Colon. Mr. Taft does injustice to his countrymen by treating flippantly questions involving human life by the thousand. We are not all children or fools. We do not need reports which read like the circulars of doubtful land companies.

I went to see the sewer system of Panama City. Our political engineer had put in a single pipe calculated to carry away both human offal and rain water. In dry weather the human filth stuck in the pipes and would not pass on. During the last rain, a few days ago, the volume of water was so great that it backed the sewage up into the cellars and ruined many houses, to say nothing of threatening the foundations of many more.

Who did this job? Has he been dismissed from the service or has he been brought to trial?

When I looked into matters of this nature I soon learned that So-and-So was the protégé of Senator this or Senator that—there was nothing to do but keep it out of the papers and lay all the blame on the climate or the rain.

A plain man naturally asks, Why was a sewerage system undertaken without first knowing something of local conditions? Or I might go further and ask, Why was a sewer built at all? What we need on the Isthmus is not sewers, but common cleaning of the streets, back yards, and cesspools. Sewers are things of doubtful utility in communities that are not trained to them. Madrid has no sewers. Berlin had none until after the war with France. Baltimore is but now talking about the matter.

What we need on the Canal Zone is an honest and efficient corps of sanitary police, who shall go daily from house to house, not with medicines and ridiculous disinfectants, but with shovels and brooms and carts, doing daily for Panama what the Japanese or Malay head of a village does in his little paradise.

That form of sanitation can be controlled, and it is, moreover, in harmony with the traditions of the people.

An official of the railway called my attention to needless waste of time and money, saying, in substance:

Let us suppose that the chief orders a certain house repaired—and there is much of this, for the old French Company has left us a handsome legacy of excellently planned and built houses extending the whole line of the canal.

The work begins, and, according to official rules, the estimate is made and application filed for a fixed amount of supplies, calculated according to such needs as were apparent at the time of survey.

The gang of carpenters, etc., are at work—and let us note again parenthetically that under present conditions it is something to brag of when you can hold a gang of negroes long together to do such a job!

Well, as you proceed with the repairs as ordered, you may discover certain defects which were not apparent on first inspection. A new estimate must be made. A new application must be filed. This application must pass to a superior bureau—a higher official must indorse it and pass it on to another. Finally the order is approved and filed with the railway company. They take their time, and thus, for the sake of a few feet of planks or a pound of nails, the chief engineer

may be compelled to hold up for many days a work involving hundreds of men, all drawing pay for doing nothing.

This red tape is one reason why the negroes have to wait so long for their pay—often more than two weeks. The accounts have to be audited in so many different ways that many a negro, particularly if he is sick and anxious to sail for Jamaica, will sacrifice his pay rather than lose "the number of his mess" on board the steamer.

When the hospital work was consolidated—that is to say, the Republic of Panama made to work together with the doctors of the American Canal Zone—the American medical chief insisted upon buying his professional instruments in America.

The Panama medical chief objected, on the ground that they were better in Germany, to say nothing of being less costly. The American chief, however, insisted and carried his point, on the ground that it was more patriotic to be cut up with a costly, but inferior, implement rather than buy one that was cheap, but foreign.

But on the day when the American chief was embarking for New York in order to purchase his supplies of American tools the Panama doctor came to him and said: "I can buy those identical American tools here cheaper than you can buy them in New York. A German house orders them for me. They go from New York to Berlin and from Berlin a second time across the Atlantic, and in spite of all that travel I get them here cheaper than you can in New York."

If anyone doubts this story I beg to offer him all the evidence that would carry conviction in a court of law.

On the occasion of my visit the clergy of the Isthmus were loud in protest because the United States authorities had imported at considerable expense several hundreds of colored ladies.

Prostitutes are not needed on the Isthmus—and if they were there is no call to send for them at the expense of the taxpayer. They may be trusted to come without any especial assistance whenever Colon clamors for kindred consolation. For further details in this matter I refer the inquisitive reader to ministers of the gospel now on the Isthmus—for instance, the Rev. Thomas H. Wood, who has been a missionary in South America; Rev. Mr. King, of the British Wesleyan Church; the rector of St. Paul's Episcopal Church, Mr. Eskins.

The correspondent of the New York Herald at the Isthmus is an ornament to his difficult and honorable calling, and his letter of November 18, which arrived in time to flavor the Thanksgiving sermons of many American pulpits, is a document which our Washington officials should occasionally refer to when preparing an address on the elevating influence of American rule over alien races.

The way to fight such immorality at the Isthmus is to raise up conditions favorable to family life. In order to encourage young men we should prepare places where they can bring their wives and rear families. Furthermore, the same power which recruits the man should also have some say anent the woman who is destined to make or mar his career. We want no vapid village belles or women who come here limp from idleness and overeating. We want women who can sew and cook and bring up babies and cheer their husbands, and of this kind we can not have too many.

To-day we have the grotesque picture of a legal tribunal at the Isthmus, the head of which is Spanish, serving out law according to Spanish usage; and with him are associated two Americans who know

but their own local American law, and who are not even familiar with the language of the place, which is Spanish.

The confusion resulting from this may be compared to what would result if we attempted to run a transcontinental train without determining beforehand a standard of time.

I met many American officials who knew not a word of Spanish. Even the two doctors who came aboard my ship to torment innocent passengers knew not a word of Spanish, albeit they were in a Spanish port and dealing with passengers from Spanish-speaking countries.

Criticism is barren unless sympathetic and constructive. Is this narrative discouraging?

Not at all, for it has, I hope, helped us to note the fact that the alarms which have been raised about the Isthmus are largely bugaboos and that the present problem is one with which we, in our mechanical and engineering capacity, are familiar.

In other words, we have but to apply business methods to a business proposition, and then, and not till then, will the filth fly, and also the dirt at the bottom of the big ditch. But first all we must make the politicians fly—the barnacles, the drones, the men with weak chins and flabby lips, who to-day are standing about the works of the Isthmus and acting as a constant source of discouragement to negroes, who know the difference between a real man and the “ornary, mean white trash!”

We are practical men—let us therefore profit by the experience of our predecessors.

The practical man does not build a hotel in a swamp; he makes inquiries and does not select a site where fever is the main crop.

The practical man drains his fields before inviting his friends to build homes. A practical man would have drained Colon before permitting 10,000 negroes to settle there.

The practical man would immediately take those negroes away from that swamp, where they are losing their strength, and locate them in camps on the neighboring hills.

The practical man asks why there is not common justice for the negro; why there are not tribunals before which labor disputes can be summarily treated.

The practical man wants to know why we can not appoint agents for the protection of negro interests, just as we appoint similar officers to protect immigrants arriving in New York.

The practical man asks for the dismissal of the present army of useless white officials and a selection of competent men at fair salaries, according to business principles.

Civil-service examinations should be required—such examinations as would satisfy a practical man—a physical examination, and above all, a searching moral one, in order to satisfy us that he has the qualities that go to make an all-round, sound, straight, and common-sense servant of his Government.

To-day it would be a reckless father who would advise a son to take employment on the Canal Zone. Yet under practical conditions such a service would draw our best young men.

The pay need not be high, but the candidates must feel that the eye of an honest commander is on them and that they will be promoted according to merit.

The practical man also realizes that the success of the canal is bound up with the nature of the powers which may be given to the general commanding the labor forces on the Isthmus.

The man to whom this honor is intrusted should be made to feel that his position is not for this year or even for ten, but for life. He should be the dictator of the whole Zone and its adjacent municipal territory, and in this post feel the same security as a judge of the Supreme Court at Washington.

The salary should be generous, with a retiring pension for disability or old age. He should have an official palace in which to receive official guests, and also an adequate allowance for necessary entertainment.

Such a commander would immediately cut off from the pay rolls the fancy men drawing \$10,000 for worse than useless duties. He would abolish the \$10,000 a year press agents, who are not needed, unless you admit that the Government needs to conceal the truth.

This proposed chief is not far off—there are plenty of them within call of the White House telephone. West Point alone could furnish a dozen of them to-morrow, to say nothing of the Boston Institute of Technology.

Mr. Roosevelt and Mr. Taft no doubt mean well when they give us the assurance that political jobbery is foreign to their natures. At the same time, jobbery flourishes under their noses and they appear to be incapable of stopping it. The people at large need to appreciate this fact and to consider some change in a system which already gives ominous signs of rottenness.

PANAMA, *December, 1905.*

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59TH CONGRESS }
1st Session }

SENATE

} DOCUMENT
No. 429

REPORT
OF
JOSEPH L. BRISTOW

Special Panama Railroad Commissioner

TO THE
SECRETARY OF WAR

—
JUNE 24, 1905
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Published by Office of Administration, Isthmian Canal Affairs



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REPORT OF JOSEPH L. BRISTOW, SPECIAL PANAMA RAILROAD
COMMISSIONER, TO THE SECRETARY OF WAR.

WAR DEPARTMENT,
SPECIAL PANAMA RAILROAD COMMISSIONER,
Washington, June 24, 1905.

SIR: On January 13, 1905, I was appointed by the President a special commissioner for the purpose of "visiting the ports of the Pacific coast, the Isthmus of Panama, New York, and such other ports as may be necessary, to make an investigation into the present trade conditions and freight rates between the Atlantic and Pacific coasts, across the Isthmus of Panama, and between the west coast of South America and the east coast of the United States and Europe, for the purpose of determining the best policy to be pursued in the management of the Panama Railroad Company."

In compliance with the order of the President, and as directed by the Secretary of War in a letter of instructions dated January 19, 1905, a copy of which is herewith submitted, marked "Exhibit A," I have the honor to make the following report:

I first visited the city of New York, where the general offices of the Panama Railroad Company are located, examined the records of the company, and conferred with its officers. I also submitted a list of questions to Mr. E. A. Drake, vice-president and secretary, who was the executive officer in charge, asking for certain detailed information in regard to the management of the company. A copy of this list of questions, with Mr. Drake's answers thereto, are submitted herewith (Exhibit B).

After completing this preliminary work in New York I sailed February 7, on the steamship *Advance*, for the Isthmus of Panama, arriving at Colon February 14. I spent ten days on the Isthmus: examined the condition of the railroad, its roadbed and equipment, and conferred with Mr. H. G. Prescott, the acting superintendent, as to the local management and supervision. I also conferred at length with Hon. John F. Wallace, chief engineer of the Isthmian Canal Commission, and submitted to him a number of inquiries, a copy of which, and his answers thereto, are submitted herewith (Exhibit C). I had several conferences with Maj. Gen. George W. Davis, governor of the Isthmian Canal Zone. On February 23 I sailed north from Panama on the steamship *City of Panama*, visiting the principal Pacific coast ports of Costa Rica, Nicaragua, Salvador, and Guatemala, and landed on March 5 at Salina Cruz, Mexico. While on the Isthmus of Tehuantepec I examined the proposed harbors which the Mexican Government is constructing at Salina Cruz and

Coatzacoalcos and the Tehuantepec National Railway, running from Salina Cruz to Coatzacoalcos. I then sailed from Coatzacoalcos for Veracruz, and from there traveled by rail to Mexico City, where I called upon President Diaz and Hon. Leandro Fernandez, minister of communications and public works. After completing my work in Mexico I visited the cities of San Diego, Los Angeles, San Francisco, Portland, Tacoma, and Seattle, on the Pacific coast of the United States, and, after conferring with the Secretary of War in Washington, visited the Gulf ports of Pensacola, Mobile, New Orleans, and Galveston.

I also have had correspondence with all of the American consuls and consular agents stationed on the western coast of Mexico and Central and South America, asking them for certain information in regard to the commerce between the United States and the ports at which they are stationed. My inquiries and their replies are herewith submitted (Exhibit D).

CONSTRUCTION OF THE PANAMA RAILROAD.

In 1835, pursuant to a resolution offered in the United States Senate by Henry Clay, President Andrew Jackson appointed Mr. Charles Biddle a commissioner to visit the different routes on the continent of America best adapted for interoceanic communication and to report thereon with reference to their value to the commercial interests of the United States. Mr. Biddle proceeded to the Isthmus of Panama; landed at Chagres, a harbor at the mouth of the Chagres River; spent several months upon the Isthmus, and finally, accompanied by Don Jose Obaldia, a member of the Congress of the United States of Colombia, or New Granada, as it was then called, he visited Bogota, the capital, and there, after repeated delays, secured from the Government a decree giving him the right to build a railroad across the Isthmus of Panama. He returned to the United States in 1837 with this document, but died before he was able to prepare his report. Nothing further was done until 1848, when Mr. William H. Aspinwall, Mr. Henry Chauncey, and Mr. John L. Stephens on their own motion secured a concession from the Government of New Granada for the construction of a railroad across the Isthmus, and in 1849 a charter was granted by the legislature of the State of New York for the formation of a stock company, known as the Panama Railroad Company.

After a number of surveys and a careful examination of the coast it was determined to establish the terminus of the railroad on the Atlantic side at the Bay of Limon, or Navy Bay, as it was more frequently called, and the terminus on the Pacific side at the old Spanish colonial city of Panama. Mr. J. L. Baldwin, an engineer employed by the company, had discovered a gap in the mountains at a place called Culebra, the highest elevation of which, as he measured it, was 286 feet. This gap was on the line between Navy Bay and Panama and largely influenced the company in determining upon the route for its railway. In 1849 a contract was entered into with Messrs. George M. Totten and John C. Trautwine for the construction of the road. The original plan was to begin the work upon the highlands of the Isthmus about 30 miles from the Atlantic waters, using the Chagres River, which was supposed to be navigable for

light-draft boats, for the transportation of supplies, machinery, and laborers; but this was found to be wholly impracticable. The Chagres River at low water was not navigable for over 8 miles, while at high water the currents were too strong for successful navigation with light-draft boats. It was then determined to begin the construction of the railroad at Navy Bay. The island of Manzanilla was acquired by the company as a site for its Atlantic terminal. This island has an area of about a square mile and is separated from the mainland by a shallow bayou. At that time it was mostly swamp and thickly overgrown with mangrove trees and tropical jungle. From this island the first 13 miles of the proposed road was through a deep morass covered with dense tropical undergrowth and infested with reptiles and countless swarms of poisonous insects. In May, 1850, Messrs. Trautwine and Baldwin, with half a dozen native Indians, landed on this island from a canoe and began clearing the jungle, or "broke ground," in the construction of the Panama Railroad. A village was afterwards established at this point and named Aspinwall, in honor of the original promoter of the enterprise. The laborers were brought from Cartagena, New Granada, where they had been employed on similar work. It was supposed that they would be able to endure the climatic conditions of Panama, but within a few weeks after landing a majority of them were taken with malarial fevers; several died, and the work was practically suspended until a fresh supply could be secured. From the beginning the labor question was the perplexing problem for the contractors. Irishmen were brought from New Orleans, negroes from Jamaica, and natives from the adjacent tropical countries; but the best laborers could not stand the climate, and those who could gave unsatisfactory results. After careful inquiry it was believed that Chinese labor would be the most successful, and 1,000 Chinese coolies were imported; but these Chinamen had not been employed thirty days when they were taken with an uncontrollable melancholia; many of them committed suicide, large numbers were taken sick, and within sixty days after they were landed there were not more than 200 left that were capable of work. At one time, by a great effort, the company had about 7,000 laborers at work on the construction of this road. The surveyors, in locating the route, were compelled to work for days waist deep in water and slime, breathing an atmosphere full of pestilential vapors and beset by the most annoying insects; but, with the pluck and inflexible determination so characteristic of American pioneers, they persevered against what appeared to be almost insurmountable difficulties, and on October 1, 1851, a work train passed over the railroad from Aspinwall to Gatun, a distance of 8 miles. In the following month two ships, carrying 1,000 immigrants bound for California by the way of Panama, unable to land at the mouth of the Chagres River, the usual landing place for vessels in the California trade, took refuge in the harbor of Navy Bay, the point selected as the railroad terminus, and had their passengers transported across the morass by the work trains of the railroad to Gatun, where they took the trail for Panama. This was the first commercial business transacted by the Panama Railroad. From that date ships landed at Navy Bay instead of at the mouth of the Chagres River, and on the 2d of February, 1852, the town of Aspinwall was formally established. Finally, on the 27th day of January, 1853, after more

than six years of the most perplexing difficulties, the railroad, 47 miles long, was completed, at a cost of over \$8,000,000. It is impossible for an American who has not visited the Tropics and had experience in penetrating tropical morass and jungle to comprehend the difficulties which the original promoters of the Panama Railroad had to meet in constructing this isthmian highway.

During the first ten years of its operation this railroad transported over \$700,000,000 worth of specie and 300,000 bags of mail, and it is said that not a dollar of the specie nor a bag of the mail was lost.

ITS STEAMSHIP CONNECTIONS.

In 1856, the first year after its completion, the railroad company began operating a steamship line between Panama and San Jose de Guatemala, which was the principal port on the Pacific coast of the Republic of Guatemala. This line of steamers was continued until October, 1872, when it was transferred to the Pacific Mail Steamship Company, and a traffic contract, covering a period of fifteen years, was made with that company. When that contract expired others were made, usually with the Pacific Mail Steamship Company; but at one time the Panama Railroad Company established a line of its own between San Francisco and Panama. In 1902, however, its own line was withdrawn, and a contract made with the Pacific Mail Steamship Company, which still exists. Shortly after the road was completed—the exact date I have been unable to ascertain—a line of sailing vessels was established between Aspinwall and New York. This line of sailers was continued until 1870. From that date various traffic arrangements have been made with steamship lines connecting Aspinwall, or Colon, as it is now called, with American ports; but in 1893 the Panama Railroad Company established, between New York and Colon, a steamship line of its own, which is still in operation.

THE CONCESSION.

The concession granted the Panama Railroad Company by the Republic of New Granada for the construction of a railroad across the Isthmus of Panama was very sweeping in its provisions. (Exhibit E.)

Among other things it provided that:

While the exclusive privilege granted to the company or persons engaged in the enterprise of building the railroad from one ocean to the other continues in force, the Government of the Republic agrees neither itself to build nor to grant to any other company whatever, under any title whatever, the right of building any other railroad on the Isthmus of Panama; and it is likewise stipulated that while the said privilege continues in force the New Granadian Government shall have no power to undertake, nor to permit any other person to undertake, without the concurrence and consent of the said company, the opening of any maritime canal to unite the two oceans across the said Isthmus of Panama.

In 1867 this provision was modified as follows:

But it remains stipulated that the right which is conceded to the company to give its consent does not extend to its opposing the construction of a canal across the Isthmus of Panama (except on the actual route of the railroad itself), but only to its exacting an equitable price for such privilege, and as indemnification for the damages which the railroad company may suffer by the rivalry or competition of the canal.

It was also stipulated that a part of the money that might be received by the railroad as damages should go to the Colombian Government.

Exclusive privilege was also granted to the company for forty-nine years—

To use the ports situated at the two termini of the railroad, required for the anchorage of vessels, and for the loading and unloading of goods which are to pass over the said road.

The provisions of the concession have been modified several times since the original grant, and the period for which it ran extended to ninety-nine years from 1867; but no material changes affecting the exclusive character of the franchise were made.

When the French company sought from the Colombian Government a concession to construct a canal across the Isthmus it found that the consent of the Panama Railroad Company was necessary, and after some negotiations concluded to buy the railroad, and in that way secure the advantage of its concession, rather than undertake to purchase its consent, which would have to be approved by the Colombian Government. After repeated efforts they finally, in August, 1881, secured possession of sixty-eight seventieths of the stock, paying \$250 per share, and in addition consented for the American stockholders to strip the company of all the cash and accumulated surplus, so that the actual amount received by the American shareholders was about \$291 per share for stock the commercial value of which at that time was only a little above par. When the United States bought the property of the French canal company among its assets were the sixty-eight seventieths of the stock of the Panama Railroad.

The railroad has been bonded for various amounts since 1851. In 1897, however, all bonds were retired (Exhibit B 20) and a new issue of 4,000 first mortgage $4\frac{1}{2}$ per cent twenty-year gold bonds of \$1,000 each was made. Of these bonds 3,374 were sold and 626 were retained in the treasury of the company. At the time the property was acquired by the United States Government 1,002 of the outstanding bonds had been redeemed, so that there remain now standing as an indebtedness against the company 2,372 of these bonds, aggregating \$2,372,000.

Under the terms of the concession the railroad is required to pay to the Colombian Government an annual indemnity of \$250,000. The Panama Railroad Company therefore has not only been required to pay from its earnings interest on its bonded indebtedness and its operating expenses, but also this annual indemnity of more than \$5,000 per mile. In 1880 the Panama Railroad Company, at the request of the Colombian Government, converted this annual indemnity into bonds for a period of twenty-seven and one-half years. These bonds were sold by the Colombian Government to private capitalists, so that this indemnity is now being, and will continue to be until 1908, paid to the purchasers of these bonds. After that, by the treaty under which the canal is being constructed, that amount will be paid by the United States Government to the Republic of Panama. Whether or not at that time the Government will relieve the railroad company of the burden of this annual payment is not yet determined.

DIVIDENDS.

The railroad paid dividends on its capital stock every year from 1853 to 1892. (Exhibit F 1.) The smallest dividend during this entire period was 2 per cent in 1885, and the largest 44 per cent in 1868.

In 1865 the capital stock was increased from \$5,000,000 to \$7,000,000. In 1881, the last year that the railroad was owned by the American capitalists, a dividend of 52½ per cent was declared. This, however, not only represented the earnings of that year, but included the assets on hand at the time the road was sold to the French canal company. The average annual dividend paid from earnings of the company from 1853 to 1881, the year that the property was transferred to the French, was a fraction less than 16 per cent. The average annual dividend since 1881 has been a fraction under 5 per cent. So it appears from the above that this railroad has always been a financial success, and when under control of the American stockholders it was exceedingly profitable.

OFFICERS AND MANAGEMENT.

The officers of the company on January 20, 1905, the time this investigation began, were:

	Salary per annum.
President, J. Edward Simmons.....	\$10,000
Vice-president and secretary, Edward A. Drake.....	8,500
Treasurer, Sylvester Deming.....	5,200
General manager, Charles Paine.....	7,000
Assistant secretary, Thomas H. Rossbottom.....	2,400
Traffic manager, R. L. Walker.....	6,000
Auditor, John Adams.....	3,300

The firm of Sullivan & Cromwell was retained as general counsel at an annual salary of \$6,000. The subordinate officers and clerks seem to have received the usual salaries paid for work of that character in the city of New York. The offices of the company were located at 24 State street, and seemed to be suitable for the purposes, and the rent paid reasonable. From the general offices in New York the business of the company has been managed. While there has been a general superintendent on the Isthmus, and a local accounting office, still the work of the general superintendent and his subordinates has been only supervisory. All questions of policy were determined by the New York office. The salaries of employees on the Isthmus are about the same as those paid by the railroad companies in the United States for a similar class of work. Compensation of employees doing technical work is usually in excess of that paid in this country, but in the lower grades of labor it is somewhat less. As a rule laborers of the lower class are not as efficient as here, and in the aggregate it costs more to accomplish the same results on the Isthmus than in this country.

EQUIPMENT.

The railroad is equipped with rolling stock (Exhibits B 18 and G) as follows: Twenty-four road engines, 11 switch engines, 5 special engines, 19 passenger coaches (first and second class), 7 baggage cars; freight cars as follows: Five hundred and eighty-four box, 173 coal, 151 flat, 22 local express, 1 wrecking car, 5 cabooses, 2 specie cars, 9 water cars, and 9 stock cars. It also has 2 iron tugs, 19 freight lighters, and 1 floating pile driver. This equipment is old and out of date. A large majority of the freight cars are of only 12-ton capacity, are not equipped with air brakes, and would be discarded by any up-to-date railroad. It should be said, however, that the Panama

Railroad, being located on the Isthmus, 1,400 miles from the nearest American port, and having no railroad connections, was not required to utilize as modern equipment as would be necessary for an American railway. It has machine shops, a foundry, and car shops located at Colon, where it has successfully repaired its cars and engines, and, indeed, many of the freight cars which are now in use have been rebuilt upon the Isthmus. The officers of the company doubtless have never felt that the expense necessary for the reequipment of the railroad with modern rolling stock would be justified, considering the use that it was able to make of the old equipment and the amount of business which it handled. The roadbed is in good condition, and the light 56-pound rails are all being replaced with 70-pound steel rails.

At Colon the Panama Railroad Company has 3 wooden wharves, and freight is discharged from the ships to the wharves and loaded from the wharves to the cars for transit across the Isthmus. The depth of water at these wharves is 26 feet at low tide. On the Pacific side, at Panama, there are 3 wooden wharves, at which freight must be handled by lighters because of the shallowness of the water. There is also a steel pier at La Boca, which is connected with the main line from Panama by a track $2\frac{1}{2}$ miles in length. The pier is 460 feet long, and has a depth of 26 feet of water at low tide. The books of the Panama Railroad Company show that this pier cost \$2,220,357.18, which is certainly a very excessive price. It should have been built for much less; but since it was constructed while the road was the property of the old French canal company, it did not appear that an investigation as to the cause of this excessive cost could properly be made a part of this inquiry. Before the pier was built all freight was handled between ships and wharves by lighters, and at times lighters are still used, the pier being too small to take care of all the business during the busy seasons.

The railroad has maintained a hospital on the Isthmus to care for the sick and disabled of its employees, and also maintained a commissary, from which the employees of the company could get provisions at cost with a small per cent added. The company also owns the telegraph line which crosses the Isthmus and forms a connecting link for the cable lines on the Atlantic and Pacific sides.

The town of Colon is a tropical village located on the island of Manzanilla. This island is owned by the Panama Railroad Company, with the exception of three small tracts, one of about 10 acres, belonging to the Republic of Panama, one belonging to the Pacific Mail Steamship Company, and one to the Royal Mail Steam Packet Company, upon both of which are erected wharves. With the above exceptions the land of the island, consisting of about 760 acres, is divided into about 3,600 lots, of which 900 are at present leased to different individuals, who have erected buildings on them. The company receives an annual rental for the use of the land, which in 1904 aggregated \$8,500. The railroad has about 34 buildings of its own in Colon. It also owns a number of buildings in Panama, from which it received about \$6,000 for rentals last year.

For twelve years the company has operated a steamship line between New York and Colon. Six steamers, all American register, were in use on this line January last. (Exhibits B 9 and 10.) Three are owned by the company and three chartered. The ships owned

are iron freight and passenger steamers, consisting of the *Alliance*, the *Advance*, and the *Finance*. The *Alliance* was built in 1886, has a net tonnage of 2,205 and speed of 13 knots. The *Advance* and the *Finance* were built in 1883 and are ships similar to the *Alliance*, except they are of 300 tons less burden. The three chartered steamers were the *City of Washington*, an iron ship of 1,744 net tonnage, for which \$200 per day was paid, the *Orizaba*, a steel steamer having a net tonnage of 2,334, for which \$250 per day was paid; and the *Seguranca*, a steel ship with a net tonnage of 2,933, for which \$262.50 per day was paid.

The Panama Railroad Company owns the wharves at Colon, with the exception of two, one belonging to the Royal Mail Steam Packet Company, of London, and an old wharf owned by the Pacific Mail Steamship Company. The latter is out of repair and has not been in use for several years. For twelve years since the steamship line was established the railroad has reserved the exclusive right of handling by its own steamers all commerce between the Atlantic ports of the United States and the Pacific ports of North and South America. For business with Europe and other countries the railroad has connections on the Atlantic side with eight steamship lines. (Exhibit B 35.) Three of these are English, one French, one German, one Austrian, one Spanish, and one Italian.

In October, 1903, a traffic agreement was entered into by which the United Fruit Company, a Boston corporation, operating a large number of ships engaged in the tropical fruit trade between Central and South American ports and ports of the United States and Europe, was given traffic connections at Colon, and since that date it has been transporting freight and passengers between New Orleans and that port.

COMPLAINTS.

A number of complaints against the traffic policy and management of the Panama Railroad had been made at the time this investigation began.

These complaints may be summarized as follows:

That the local freight and passenger charges were excessive;

That the railroad had entered into a traffic contract with the Pacific Mail Steamship Company which was monopolistic in its character and of great injury to commerce between the eastern coast of the United States and the Pacific coast of the United States, Mexico, Central and South America;

That it had entered into traffic contracts with the Pacific Steam Navigation Company and the Compañia Sud-Americana de Vapores which were detrimental to commerce between the United States and South America;

That the Panama Railroad Company has maintained for its own steamships a monopoly of all trade via Panama between the Atlantic seaboard of the United States and the west coast of North and South America;

That goods shipped via Panama are carelessly handled, resulting in heavy losses by damage and theft;

That there is a congestion of freight at Panama and Colon, caused by a lack of facilities; and

That commercial business is made secondary to canal business, greatly to the injury of commerce.

LOCAL RATES.

There appears to have been a great deal of complaint as to excessive charges of the Panama Railroad Company for local passenger and freight traffic. The rates formerly were excessive, but a new schedule was put in force on February 1, 1905, which appears to be reasonable and has relieved these complaints in a very great measure. As to whether this schedule is a proper one experience must determine, and those responsible for the detail management of the railroad must pass upon questions that come up affecting the advisability of the present rates.

THE PACIFIC MAIL CONTRACT.

On the Pacific side the Panama Railroad has a traffic contract with the Pacific Mail Steamship Company, of San Francisco (Exhibit B 37), by which it agreed to give to that company the exclusive privilege of through bills of lading to and from any and all ports of Central America, Mexico, the United States, and British America on the Pacific coast, and as a result of such agreement on the part of the Panama Railroad Company the Pacific Mail Steamship Company contracted that any merchandise taken on its vessels at San Francisco, or any Pacific coast port north of Panama, for shipment to Atlantic or Gulf ports of the United States, or to Europe, should be given through bills of lading only by way of the Isthmus of Panama. Both parties agreed to cooperate in making such rates and in taking such measures as would afford to both protection against interference or competition by other steamship lines with the traffic conceded by each to the other. It was further agreed that the Pacific Mail Steamship Company should establish a regular schedule service of not less than three ships per month between San Francisco and Panama, that the Panama Railroad Company should conduct a similar steamship service between New York and Colon, and that neither company would establish lines competing with the other on either the Atlantic or Pacific Ocean.

By this contract the division of rates was made as follows:

It is agreed that through freight rates, so far as the same accrue to the railroad company and steamship company, shall be divided between them as follows:

On freight between United States Atlantic coast ports and United States Pacific coast ports—

To the railroad company, fifty per cent (50%).

To the steamship company, fifty per cent (50%).

Minimum rate, forty cents (40c.) per hundred pounds, or ten cents (10c.) per cubic foot.

On freight between United States Atlantic coast ports and Mexican or Central American ports—

To the railroad company, sixty per cent (60%).

To the steamship company, forty per cent (40%).

Minimum rate to or from Mexican ports, sixty cents (60c.) per hundred pounds, or thirty cents (30c.) per cubic foot, ship's option.

Minimum rate to or from Central American ports, fifty cents (50c.) per hundred pounds, or twenty-five cents (25c.) per cubic foot, ship's option.

On freight between European ports and Mexican or Central American ports—

To the railroad company, forty per cent (40%).

To the steamship company, sixty per cent (60%).

Minimum rate, thirty-five shillings (35s.) per ton of twenty-two hundred and forty (2,240) pounds, or forty (40) cubic feet.

On freight between European ports and United States Pacific coast ports—

To the railroad company, thirty-seven and one-half per cent (37½%).

To the steamship company, sixty-two and one-half per cent (62½%).

Minimum rate, forty cents (40c.) per hundred pounds, or ten cents (10c.) per cubic foot.

The above prescribed divisions between the railroad and steamship company shall apply

to the portion of the through freight rates accruing to said companies on business and traffic, whether originating at or destined to the ports above mentioned or points prior or subsequent thereto.

It will be observed from the above that the minimum rate between the Pacific coast ports and the Atlantic coast ports of the United States is 40 cents per 100 pounds or 10 cents per cubic foot, while the minimum rate between the Mexican ports and the Atlantic coast ports is 60 cents per 100 pounds or 30 cents per cubic foot, and the minimum rate between the Central American ports and the Atlantic coast ports is 50 cents per 100 pounds or 25 cents per cubic foot. It therefore appears that a larger minimum is fixed for the shorter distances, it being from 1,000 to 2,500 miles nearer New York from Central American and Mexican ports than from the Pacific coast ports of the United States. Two reasons are given as justifying this schedule. First, that the expense of handling cargo at Central American and Mexican ports is much greater than at United States ports, and that, therefore, the charge should be more. Second, that competition by the transcontinental railways between the United States ports is severe, and that a rate was required to meet this competition. It will also be observed that the railroad company received 60 per cent of the rate between the eastern ports of the United States and Mexican and Central American ports and the steamship company 40 per cent. This division is based upon the greater service performed by the railroad company, it carrying the freight between Panama and Colon by rail and by its steamers between Colon and New York. It will be further observed that on freight between European ports and Mexican and Central American ports the railroad company received 40 per cent and the steamship company 60 per cent, and on freight between European ports and the United States Pacific coast ports the railroad company received $37\frac{1}{2}$ per cent and the steamship company $62\frac{1}{2}$ per cent. These divisions relate to that part of the through European rate that is due to the railroad company and steamship company for transporting this freight between Colon and the Pacific coast ports. On business between Europe and Mexico and Central America the per cent of the through rates which each carrier received varied. On Central American freight the Panama Railroad received $23\frac{1}{2}$ per cent, the Pacific Mail Steamship Company 35 per cent, and the European line $41\frac{1}{2}$ per cent. On Mexican business the Pacific Mail Steamship Company received $37\frac{1}{2}$ per cent, the Panama Railroad Company 25 per cent, and the European line $37\frac{1}{2}$ per cent. The steamship company was required, in addition, to pay at Panama a wharfage charge of 80 cents per ton; also a charge of 10 cents per ton for use of the cranes. Subject to the agreed minima, the rates charged were fixed by the initial carrier, that is, the rates on all commerce originating on the Atlantic coast were fixed by the Panama Railroad Company, and on that originating on the Pacific coast north of Panama by the Pacific Mail Steamship Company. If any desirable business was offered at a rate below the minimum the acceptance of it was made a matter of conference and special agreement between the companies. A large majority of the freight, however, paid a greater rate than the minimum. At the time this contract was entered into the Pacific Steam Navigation Company and the Compañía Sud-Americana de Vapores had traffic agreements with the Panama Railroad, and were making ports north of Panama in competition with the Pacific Mail Steam-

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ship Company. It was therefore stipulated in the contract that the Panama Railroad Company should notify these companies that after ninety days it would refuse to through bill any merchandise to or from ports north of Panama by any line other than the Pacific Mail Steamship Company, and that it would use its good offices to bring about a division of territory whereby these South American lines should confine their business south of Panama, in which event the Pacific Mail Steamship Company would agree not to run ships south of Panama. There was also a provision in the contract that, in the event these South American lines refused to consent to such a division of territory and withdrew their existing lines connecting Panama with points on the Pacific coast south, the Pacific Mail Steamship Company would, within one hundred and twenty days, establish a steamship line running between Panama and Valparaiso, making regular schedule trips; and in the event that it became necessary for the Pacific Mail Steamship Company to establish such a line, the Panama Railroad Company would issue and accept through bills of lading to and from all points south of Panama only by that steamship company, and not recognize any other steamship lines or enter into traffic arrangements with them for South American business.

CONTRACTS WITH SOUTH AMERICAN LINES.

After some negotiations it appears that the South American lines reluctantly consented to the division of territory suggested above, and on the 10th day of September, 1902, the Compañía Sud-Americana de Vapores made a contract with the Panama Railroad (Exhibit F 2) quite similar in its provisions to the one which the railroad company had made with the Pacific Mail Steamship Company. By the terms of this contract the railroad company agreed not to run any steamers on the Pacific Ocean south of Panama, and further agreed to promote and protect the interests of the Compañía Sud-Americana de Vapores in all traffic in that territory in connection with the railroad and its Atlantic connecting lines, especially against all forms of competition whatsoever so far as it could lawfully control the same, except as to the Pacific Steam Navigation Company, reserving the right to enter into a similar contract with that company. Under this contract the proportions of the through rate accruing to the steamship company were as follows:

Thirty-three and one-third per cent between Europe and ports south of Panama.

Forty-five per cent between West Indies and all ports south of Panama.

Thirty-eight per cent between New York and ports south of Panama.

The minimum rate was 30 shillings per ton on New York and European freight. A wharfage charge at Panama of about \$1 a ton in addition was made by the railroad company to the steamship company.

There was also a traffic agreement entered into by the Panama Railroad Company with the Pacific Steam Navigation Company which contained the same provisions as the contract with the Compañía Sud-Americana de Vapores, and the same division of rates was established. (Exhibit F 4.)

By the terms of the contracts the fixing of rates was left to the initial carrier, subject to the right of revision by the railroad company to the end that one of its connecting carriers could not cut

through rates in competition with the other connecting carrier. On South American business the average of through European rates which the railroad company received was about 25 per cent. The South American companies agreed that each would make two trips per month, thereby establishing a regular weekly schedule to the principal ports between Panama and Valparaiso.

By these agreements the Pacific Mail Steamship Company has had the monopoly of handling all traffic by way of the Isthmus of Panama between Europe and ports on the Pacific coast north of Panama; also all business by the same route between the eastern coast of the United States and ports on the Pacific coast north of Panama; while the Pacific Steam Navigation Company and the Compañia Sud-Americana de Vapores have had a similar monopoly of handling transisthmian commerce with all ports on the Pacific coast south of Panama.

The Pacific Mail Steamship Company is satisfied with the contract and asks its continuance. Representatives of the South American lines advised me when in Panama that their companies preferred that the Pacific Mail Steamship Company contract be abrogated, so that they could again go north of Panama to the ports of Central America, Mexico, the United States, and Canada. Representatives of a number of the Central and South American governments joined in a request (Exhibit II) that the contracts with the Pacific Mail Steamship Company and the two South American lines be abrogated.

COMPLAINTS OF CENTRAL AMERICAN COUNTRIES.

Representatives of the Central American countries complain that as a result of the contract between the Panama Railroad Company and the Pacific Mail Steamship Company excessive rates are maintained, and cite as illustrations those charged by lines for carrying freight by way of the Straits of Magellan. They allege that there is also a discrimination in rates against New York in favor of Europe; that this discrimination is very injurious to commerce between their countries and the United States; and further, that these excessive rates are a great impediment to the development of the commerce of their respective countries.

In considering these complaints I have investigated the rates of the western ports of all the Central American countries whose representatives joined in the complaints.

COSTA RICA.

Punta Arenas is an important port on the western coast of Costa Rica. It is 85 miles from San Jose, the capital. Coffee is the principal product of this as well as of all the Central American countries, and the rates on a ton of 1,000 kilograms, or 2,200 pounds, of clean coffee will be made the basis of comparison. The rate from Punta Arenas to Europe by the way of Panama is \$15 per ton; from Punta Arenas to New York, \$11 per ton; and to Europe by the Straits of Magellan, \$12.50 per ton (Exhibit I). No coffee appears to be shipped to New York by the Straits of Magellan.

The local charges at this port are: Transportation from San Jose to Punta Arenas, about 70 miles by rail and 15 miles by cart, \$7.10 per ton; wharfage, Punta Arenas, government pier, \$1.60 per ton;

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lighterage, \$2.30 per ton, making \$11 per ton charges for transporting the coffee 85 miles and placing it at the ship's side at the Costa Rican port, being the same as is charged by the Panama Railroad and Pacific Mail Steamship Company for transporting it from Punta Arenas to New York, a distance of about 2,500 miles, 2,450 by water and 47 by rail, including all charges for wharfage and port handling at Panama and Colon.

NICARAGUA.

Corinto is one of the principal ports on the western coast of Nicaragua. About 160,000 bags of coffee, or over 10,000 tons, are shipped annually from this port (Exhibit I). The rate on coffee from Corinto to Europe by the way of Panama is \$16.25 per ton; to New York, \$15.40, and by the way of the Straits of Magellan to Europe, \$13.75. Corinto is connected with Granada, an interior city, by rail. The local charges on exported coffee through the port of Corinto are as follows: The railroad rate from Granada to Corinto, about 119 miles, is \$11.18 per ton; wharfage and lighterage charges at port, \$2.20 per ton; export duty, \$8.80 per ton, making \$22.18 per ton which the producer must pay for placing coffee at the ship's side at the local port, or \$6.78 more than the freight charges from Corinto to New York and \$5.93 more than from Corinto to Europe via Panama.

GUATEMALA.

Champerico is one of the important ports of western Guatemala. The chief product of the adjacent country is coffee (Exhibit I). It is about 39 miles by rail from Champerico to the principal coffee-producing region. The freight charges for this distance are \$6.60 per ton. The local charges on coffee shipped from this port are as follows: Export duty, \$22 per ton; railroad freight rate, 39 miles, \$6.60; wharfage, 42 cents; lighterage, \$1.27, making a total of \$30.29 that it costs to place every ton of coffee at the ship's side at Champerico, while it is transported by the Pacific Mail Steamship Company and the Panama Railroad Company to New York and Europe for about half that amount, the rate to New York being \$15.40 per ton and to Europe \$16.25 per ton.

The rate charged from San José de Guatemala, the principal port for Guatemala City, to Europe is \$16.25 per ton; to New York, \$15.40 per ton. The rate from this port to Europe by the way of Cape Horn or the Straits of Magellan is \$13.75 per ton, \$2.50 less than the rate charged by the way of Panama. The local charges on exported coffee from Guatemala City through this port are: Government export duty, \$22 per ton; railroad rate from Guatemala City to San José, 75 miles, \$12.70 per ton; lighterage at San José, \$2.43 per ton; wharfage, 54 cents per ton, making a total of \$37.67 per ton at the ship's side. The Guatemalan Government has consented for the railroad which runs from Guatemala City to San José to increase the freight rate from \$12.70 per ton to \$16.50 per ton from May 1 of this year, so that with this increase in the railroad rate the total cost of placing coffee at the ship's side would be \$41.47 per ton.

It does not appear to me that the rate of \$16.25 for transporting coffee to Europe, or \$15.40 to New York, which requires carrying it by water about 800 miles to Panama, then transfer from ship to wharf and from wharf to cars at Panama, transporting it 47 miles

across the Isthmus by rail, then transfer from cars to wharf and from wharf to ship at Colon, and carrying it from there by water 2,000 miles to New York and 5,000 miles to Europe is excessive when compared with the local charges in these Central American countries. The rate by the Pacific Mail Steamship Company and the Panama Railroad Company from San Jose to New York is less than the rate which the railroad is permitted by the Guatemalan Government to charge for transporting coffee from Guatemala City to the coast, a distance of 75 miles.

From the foregoing it would appear that if there are impediments to Guatemalan commerce they are not placed there by the Panama Railroad Company and the Pacific Mail Steamship Company.

The rate on coffee from the Central American ports to New York is in every instance less than to Europe, so that it does not appear that these companies have been diverting coffee shipments from the United States to Europe. On hides, however, the rates are the reverse, the price per ton to New York being \$33, while to Europe it is only \$24.50. New York is an active market for hides, and in spite of this discriminating freight rate gets about half of this Central American product. The same may also be said of skins and rubber. The rates via the Straits of Magellan are cheaper than via Panama. What the actual cost of transportation per ton by each route is can not be definitely ascertained, it depending largely upon the character of the vessel used, but the fixing of these rates is presumably based upon competition. It takes from sixty to ninety days to transport coffee from Central America to New York or Europe by the Straits of Magellan, while it requires from twenty-five to forty days from Central America to New York and Europe by Panama.

Considering the time, the marine insurance, and the risk it is evidently as a rule advantageous for the shippers of Central America to use the Panama rather than the Straits route at the above rates, because about 70 per cent of the coffee produced in Central American countries is shipped by Panama. If a higher rate via Panama than \$16.25 per ton would hold the business, it would doubtless be charged. If a lower rate were necessary in order to move the commerce over that route, the rate would without doubt be reduced. This is the policy that has been pursued, so far as I can learn, by the Panama Railroad Company and the Pacific Mail Steamship Company. In making Central American rates these companies have followed the general policy of all transportation companies; that is, to fix rates so as to get the largest amount of business possible at the greatest profit. In Central America competition seems to have kept the rates at a comparatively reasonable figure.

Whether the canceling of the contract and giving all steamship lines equal privileges at Panama will lower the freight rates is a question which only experience can determine. Between San Francisco and Mexican and Central American ports the Pacific Mail Steamship Company has no monopoly. That is an unrestricted territory, open to all foreign and American lines, tramp and regular, except as to the restraint placed on the two South American lines by their contracts with the Panama Railroad, yet the rate on coffee from Central American ports to San Francisco, an all-sea route of about 2,000 miles, is \$8.80 per ton. This rate is charged by the Pacific Mail Steamship

Company and the Kosmos Line, its foreign competitor, the same line that carries freight from Central America to Europe via the Straits of Magellan, a distance of over 12,000 miles, for \$12.50 per ton. The reason of this marked difference in charges per ton per mile is doubtless because the Kosmos Line and the Pacific Mail Steamship Company are able to control the bulk of shipments from Central America to San Francisco and have agreed upon a rate, while on freight moving the other way they have been unable to control, and are therefore making competitive prices for business in that direction.

SCHWERIN SAYS CONTRACT BENEFIT TO CENTRAL AMERICAN
COMMERCE.

While in San Francisco I interviewed Mr. R. P. Schwerin, vice-president and general manager of the Pacific Mail Steamship Company, and informed him of the nature of the complaints made against the contract between the Panama Railroad and his company. Mr. Schwerin stoutly asserted that such complaints were not well founded; that the contract has been a benefit to commerce of Central America; that the steamship company has maintained a regular weekly schedule service between San Francisco and Panama, touching at intermediate points, and has offered every facility for the movement of traffic that could be offered by any steamship line. He further stated that if the contract is annulled as requested by the representatives of the Central American countries and the commercial bodies of the Pacific coast a number of competing lines will enter the field for Central American business and no one will get sufficient business to justify the maintaining of a regular schedule service; and that the freight, passenger, and mail service will therefore be irregular and unsatisfactory, and as a result the commercial interests of these countries will suffer.

The American consuls and consular agents on the Pacific coast of Central America and Mexico as a rule state (Exhibit D) that there is no impediment of any kind to the shipment of commerce between the ports at which they are stationed and the United States and Europe. One consul in Guatemala states the Pacific Mail Steamship Company has not always furnished sufficient tonnage capacity to take care of the commerce, and that as a result quite an amount of coffee has been shipped to Europe by way of the Straits which should have gone by Panama. One consul in Mexico and one in Honduras complain of the rates.

After carefully considering the complaints of the representatives of the Central American countries, the rates charged, and facilities furnished by the Pacific Mail for the handling of cargo, it appears that the service of that company has been good and the rates reasonable, taking into consideration the inconvenience and delay in receiving and discharging cargo at the Central American ports. With few exceptions the harbors are open roadsteads, and freight is loaded and discharged by lighters. When the sea is rough business is suspended, it being impossible with the facilities available to load or unload safely in a heavy sea. The ships are frequently detained for hours, and sometimes days, for trivial causes. The steamer upon which I sailed from Panama was detained in one port two days in

taking on a comparatively small amount of cargo because of the inadequate facilities for handling the freight. This same ship stopped at another point to land five passengers, having no freight to take on or discharge, and was delayed twenty hours, although there was no cause whatever for the detention except to suit the convenience of languid port officers.

I therefore can not concur in the opinion of the representatives of Costa Rica, Nicaragua, and Guatemala that the contract between the Panama Railroad Company and the Pacific Mail Steamship Company has been a serious impediment to the commerce between those countries and the United States, or that the rates are unjustly high. The contract is monopolistic in its character but the results of its operation as far as Central America is concerned has not been detrimental to commerce.

COMPLAINTS OF SOUTH AMERICAN COUNTRIES.

Complaints against the traffic agreements with the South American steamship companies have been made by the representatives of Chile, Peru, Ecuador, and Bolivia (Exhibit II).

I did not visit the South American ports, therefore have no personal knowledge as to their harbor facilities or the efficiency with which they handle cargo. My information in regard to these ports has been furnished by the consuls and consular agents of the United States located there, the rate schedules of the various steamship lines, and Mr. P. H. Cahill, the Central and South American agent of the Panama Railroad Company.

The rate of the Panama Railroad from New York on general merchandise, such as agricultural implements, boots and shoes, canned goods, carpets, leather goods, stoves, etc., to the ports of Colombia and Ecuador north of Guayaquil is 75 cents per hundred pounds, or 37½ cents per cubic foot. The rate to Guayaquil, Ecuador, which is beyond these ports, is 60 cents per hundred pounds, or 30 cents per cubic foot. The rate to all of the principal Peruvian and Chilean ports, including Valparaiso, is 50 cents per hundred pounds, or 25 cents per cubic foot. It will be observed that by this schedule the general rule is, the longer the distance the less the rate. The rate to Buenaventura, Colombia, the first important port south of Panama, is 75 cents per hundred pounds, while that to Valparaiso, which is more than 3,000 miles farther south, is 50 cents per hundred pounds. The same system is followed by the European lines. The rate of the Leyland Line, running from Liverpool and connecting with the Panama Railroad and the south Pacific lines, is \$13.75 per ton from Liverpool to Buenaventura, while the rate to Valparaiso is \$8.75 per ton, or \$5 less than the rate to Buenaventura. These rates are fixed wholly upon the basis of competition. The farther south from Panama the severer becomes competition by the Straits of Magellan. The actual cost of transporting a ton of cargo from New York or Liverpool to Valparaiso by Magellan is probably less than to transport it by Panama. At this point, therefore, the Straits route has the advantage, and rates via Panama are low to meet the competition. But north from Valparaiso the advantage is with the Panama route. The farther north the greater is the advantage, and the rate is increased as

this advantage grows, the purpose being to charge as high a rate as practicable and hold the business. The question as to the actual cost of transporting the goods is not taken into consideration except in the fixing of the minimum. This system of rate making is the basis of the complaints of the representatives of the South American countries. The system, however, is the same as that followed by other transportation companies. To illustrate: The rate on cotton from Memphis to New Orleans, a distance of 456 miles, is 17 cents per hundred, while the rate from Dallas, Tex., to New Orleans, a distance of 497 miles, is 70 cents per hundred. The distance between these two cities and New Orleans are about the same, yet the rate from Dallas is more than four times as great as that from Memphis. From Meridian, Miss., to New Orleans the distance is 197 miles, as compared with 456 miles from Memphis, yet the rate on cotton from Meridian to New Orleans is 36 cents per hundred; that is, the rate from Meridian is more than double that from Memphis though the product is hauled less than half the distance. The explanation of these apparently inconsistent rates is that Memphis and New Orleans are both on the Mississippi River, and the Memphis and Orleans rate is a competitive water rate. The cost of transporting a hundred pounds of cotton from Memphis, or Meridian, to New Orleans is only incidentally considered. It is presumed that there is profit in handling it from Memphis at 17 cents per hundred; otherwise the railroad would be carrying this freight at a loss, and in order to make up the deficit so created would have to impose excessive rates on interior consignments. The same may be said of transporting cargo from New York, or Liverpool, to Valparaiso at 50 cents per hundred pounds. If there was not some profit in it the cargo would doubtless be refused. So it appears that the Panama Railroad Company has followed the same principle in fixing rates north of Valparaiso that is followed by the American railways in making their rate schedules when river competition is a factor.

RATES FROM SOUTH AMERICA TO EUROPE LOWER THAN TO NEW YORK.

From Guayaquil, which is the principal port in Ecuador, the rate on coffee by the way of Panama to the United States, as shown by the consular reports (Exhibit D I) is \$17 per ton, while to Europe it is \$15 per ton, and to Europe by way of Magellan, \$11.25 per ton. From the foregoing it appears that the rate on coffee to New York from Guayaquil by the way of Panama is from \$1.60 to \$5.80 higher per ton than the rates from Central American ports of equal or greater distances, and that the rate from Guayaquil to Europe by the way of Panama is \$2, and by the Straits \$4.50, less than to New York. The rates, therefore, from Guayaquil to Europe by both the Panama and Magellan routes are less than to New York.

Payta is the northernmost port of importance in Peru. From this port coffee can not be made the basis of comparison, because there does not appear to have been any shipped to New York by either route.

The rate on hides from Payta to New York by the way of Panama is \$30 per ton of 2,240 pounds, while that to Europe is \$20 per ton. The

rate on Peruvian bark from Payta to New York is \$45 per ton, while that to Europe is \$30 per ton. And the same discrimination in favor of Europe prevails as to other products except raw cotton. The rate on general merchandise from New York to Payta is \$11.20 per ton, and that from Europe is \$12.50. Under the contracts which the Panama Railroad Company has with the South American lines, the initial carrier fixes the rate, so it will be observed that the rate from New York to Payta, which is fixed by the Panama Railroad, is lower than that from Europe on the same class of merchandise, while the rates from Payta, which are fixed by the South American lines, are about 50 per cent higher to New York than to Europe.

The rate on general merchandise from New York to Valparaiso, the principal port of Chile, is \$11.20 per ton, while that from Valparaiso to New York is \$30 per ton. The rate from New York to Valparaiso is fixed by the Panama Railroad Company, while that from Valparaiso to New York is fixed by the South American lines. The Compañía Sud-Americana de Vapores, one of the contracting South American companies, is a Chilean line subsidized by the Chilean Government. It appears, therefore, that this Chilean line and its South American cocarrier are responsible for the excessive rates to New York and the discrimination in favor of Europe complained of by representatives of the South American countries.

The reports of the South American consuls and consular agents show (Exhibit D) that there is almost universal complaint against the rates charged by the way of Panama.

The rates from the ports referred to apply generally, and from the foregoing it will be observed that equity has no part in the making of freight rates for the South American ports. There also appear to be more favorable rates generally to Europe than to New York. There is no doubt but that if the Isthmian railway is opened to free competition on both sides there should be a decrease in the freight rates between South American ports and New York.

COMPLAINTS FROM THE PACIFIC COAST OF THE UNITED STATES.

In considering the complaints made by the shippers of the Pacific coast cities of the United States, I visited San Diego, Los Angeles, San Francisco, Portland, Tacoma, and Seattle, and conferred with their chambers of commerce and with citizens interested in commercial affairs. I submitted a list of questions to the chamber of commerce of each of the cities visited, asking for certain information which was necessary in order to consider intelligently their complaints and which I thought would be of value in determining the policy to be pursued in the management of the Panama Railroad.

SAN DIEGO.

The Chamber of Commerce of San Diego, in reply to the questions submitted, said (Exhibit J 1) that the principal products for export from San Diego are oranges, lemons, raisins, honey, and dried fruit; that about 875 carloads of these articles are shipped annually from the vicinity of San Diego; that none of this freight goes via the Isthmus because the Pacific Mail Steamship Company, the only line

connecting with Panama, does not stop at that port; and that it would be practicable to ship the larger part of this freight East by the way of Panama if facilities were offered. It is conceded by all that oranges can not be shipped by Panama because of the climatic conditions and the length of time required in transit. It is contended by some that lemons could be successfully transported by that route if given proper attention, and they cite as proof that lemons are now shipped from San Diego by steamer to Seattle, a distance of about 1,500 miles, and reshipped from there to the East, and that these shipments are successfully made at rates lower than by rail direct from San Diego. It is very doubtful, however, whether lemons could be transported via Panama. They certainly could not with the present facilities for handling cargo on the Isthmus. But there appears to be no reason why raisins, honey, and dried fruit should not be successfully shipped that way. The chamber of commerce states that about 125 carloads of raisins and 100 carloads of honey were exported from the vicinity of San Diego last year; that the railroad rate on both of these commodities to points east of the Mississippi River is \$1.25 per hundred pounds, or \$25 per ton of 2,000 pounds. Judging from the rates fixed for transportation of other commodities it appears that \$15 per ton would be very liberal compensation for transporting raisins or honey from San Diego to New York by the way of Panama, which would be \$10 less than the railroad rate. In the event that facilities were offered by the Panama route, with this advantage in freight rates, it is reasonable to suppose that a very large part of this commerce would move that way. It is also estimated (Exhibit J 1) that 60,000 tons of merchandise are received annually at San Diego from the East; that a very large part of this merchandise would be shipped by the way of Panama if facilities existed; and that in 1904, 12,000 tons of iron and general merchandise from New York and Philadelphia were received by the way of Cape Horn or through the Straits of Magellan, while not a ton was received by Panama. San Diego has a magnificent harbor, one of the finest on this continent, and her citizens feel very keenly the refusal of the Pacific Mail Steamship Company to give them the facilities for shipment via Panama to which they think they are entitled by virtue of their location, being the nearest American Pacific port to the Isthmus.

In closing its statement (Exhibit J 1) the chamber of commerce says:

The Panama Railroad having been in the past an exclusive monopoly, managed wholly in the interests of the transcontinental railroad combine, has been of no benefit to the people of the Pacific coast, all its benefits have enured to the corporations. The Pacific Mail's monopoly of this road has been used to buttress the exorbitant railroad freight charges. Now that the road has become the property of the people of the United States we feel that it should be open to all shippers at equal rates. So opened, it would be of great benefit to the Pacific coast.

The following resolution was passed by the chamber of commerce and forwarded with its statement:

Resolved, That the Chamber of Commerce of San Diego, Cal., favors the opening of the Panama Railway to all shippers at equal rates and that no preferential rate be made.

LOS ANGELES.

The Chamber of Commerce of Los Angeles states (Exhibit J 3) that there originate annually in the vicinity of that city for shipment the following products:

Citrus fruits.....	carloads	10,000
Vegetables.....	do.	1,000
Dried fruit and raisins.....	do.	300
Nuts.....	do.	500
Wines and brandies.....	gallons	1,000,000
Wool.....	pounds	500,000
Honey.....	carloads	50
Olives and olive oil.....	do.	5
Beans.....	do.	500
Hides.....	pounds	2,000,000
Asphaltum.....	tons	15,000
Canned goods.....	carloads	500

Of these products, nuts, wines, and brandies, wool, olive and olive oil, beans, hides, dried fruit and raisins, honey, canned goods, and asphaltum can be shipped by the way of Panama, and if facilities were offered there is no reason why a large part of the commodities enumerated should not move that way.

Los Angeles is 20 miles from the sea, but the Government is constructing a harbor at San Pedro which, when completed, will make Los Angeles a seaport city. San Diego is only 120 miles distant, and if facilities existed at this time for the transportation of these products through that port at reasonable rates they would certainly be shipped in large quantities to the East by the Panama route.

In addition to the export products, the chamber of commerce states that 150,000 tons of iron and steel productions and over 30,000 carloads of groceries, paints, drugs, dry goods, paper, etc., come annually from the East to that city, and that very large quantities of this freight could be transported successfully by way of Panama if there were proper facilities. The principal difficulty in making shipment at present by that route is that the goods have to go almost 500 miles north to San Francisco and there be reshipped by rail back to Los Angeles. The expense and time required by this thousand miles of superfluous transportation are so great as to make shipment by the Panama route impracticable.

In closing, the chamber of commerce says (Exhibit J 3):

The amount of traffic between this market and the eastern part of the United States could undoubtedly be materially increased by a line of steamers plying between Panama and points on this coast, making San Pedro a regular port, having regular sailing dates and operating in conjunction with the Panama Railroad, and a similar line of steamers plying between Panama and New York, with a tariff giving, if possible, a slightly more favorable differential in favor of the Panama route than at present, to offset the various drawbacks of this route.

SAN FRANCISCO.

At San Francisco there is a very lively interest in the subject of transportation by the way of Panama. The headquarters of the Pacific Mail Steamship Company is located there, and many of her citizens are naturally interested in the success of what they term a local enterprise. I spent a week in that city, and conferred frequently with the trustees of the chamber of commerce. They also called a public meeting for Thursday, March 23, inviting all persons

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who were interested in the subject of transportation by the way of Panama to attend. The meeting was large, and the question as to whether or not the contract with the Pacific Mail Steamship Company should be annulled was discussed with animation. Different views were expressed, some advocating the continuance of the contract because it guaranteed a regular schedule service between San Francisco and Panama, while others denounced the contract as monopolistic and injurious to the commerce of San Francisco and the entire Pacific coast. I invited all those who had information which they thought would be of value to the Government to submit it in writing, giving any data which in their opinion should be considered in connection with the subject, and as a result received a large number of communications. Many of them, however, were marked confidential and related to the private business affairs of the writers and at their request are withheld from the exhibits of this report. I conferred personally with a number of the citizens, and left with the chamber of commerce a list of questions (Exhibit J 2), requesting them to secure for me certain information. In response to this request, the trustees of the chamber of commerce have forwarded a report, herewith submitted. (Exhibit J 2.)

In this report the chamber of commerce says:

The present freight schedule via Panama is apparently based on the overland railroad freight schedule, the charges of the former varying from 78 to 90 per cent, with an average of about 83 per cent of the latter; in other words, the differentials in favor of the Panama route with its thirty-day trip, as compared with the transcontinental route with its fourteen-day trip, are so small that the shipper either east or west does not consider the saving sufficient to cover risk of damage or breakage in the necessary several handlings of the goods via Panama.

Referring to this subject, one of the heaviest shippers of hardware on the Pacific coast, in a personal letter, said:

The present system of rate making via Panama, which is practically a steamship service, is based upon the railroad method of making rates under which they are compelled to take cognizance of the values of the freight, as they are responsible for its safe delivery in good order; therefore they have to consider losses by fire, collision, wreckage from washouts, and the variety of risks which a steamship or sailing vessel does not assume, as all hazard and risks except those arising from improper storage and damage therefrom are marine risks, assumed by the shipper or insurance company; in other words, they are insurable marine risks, with which the vessel has nothing to do. In the former case the railroads are, therefore, compelled to make a classified list which embraces hundreds, if not thousands, of articles, and the rates applicable to such a varied assortment of values and conditions are very numerous, especially in the commodity list which governs San Francisco freight, as you will see by consulting the railroad tariff. Under steamship or vessel service, such a list is not necessary and is not used by the European, Australian, China, Japan, or any other lines of which we have knowledge, but is confined to the Panama and Hawaiian lines, the former because it is, in our judgment, controlled by the railroad, and the latter, also in our judgment, because they are not quite independent in fixing their rates.

Continuing, the chamber of commerce, in its report, says:

If an open service were established, giving as satisfactory sailing dates as has the Pacific Mail Company's service and doing the business on a lower basis of freight rates, it would prove a very desirable arrangement, and the traffic via Panama would be greatly enlarged.

The ability to transport freight via Panama does not rest with the steamers alone. Numerous steamships with large carrying capacity can be readily obtained, but the quantity of tonnage will be measured by the ability of the Panama Railroad to handle it. That company has already a very large business to handle with South America, west coast of Central America, Mexico, and California, and its facilities should be enlarged to meet the increasing traffic over this road. There have been frequent instances in recent years when there has been a great freight congestion on the Isthmus.

Referring to the question of maintaining a regular steamship schedule, the chamber of commerce says:

It is generally conceded that a line of steamers plying between San Francisco and Panama is a commercial necessity. In this connection merchants favor a service with a regular schedule to one without schedule. Such schedule is warranted by trade requirements, and should be maintained by one or more companies, with a fixed tariff based upon a fair revenue, which would provide more equitable rates on freight. Regular established rates would doubtless better serve the commercial interests of San Francisco than open competition in rates which might fluctuate to a degree that would be disastrous.

If it can be accomplished without violation of treaty obligations, none of the Mexican and Central American tonnage now carried by American vessels should be allowed to go to foreign vessels, as it would leave the American line with only New York and San Francisco through business to live on. Receipts from way freights increase the earnings of the company and help to reduce the cost of New York and California business. If the way traffic were surrendered to foreign lines it would increase the cost of the United States interstate business and impair a service which fifty years of active operation has demonstrated should be improved.

The exports and imports of San Francisco are very great, and a large per cent of this freight can be moved by the way of Panama. About 600,000 tons of California products are shipped every year. The freight carried by the Pacific Mail steamships from San Francisco for New York in 1904 was 30,410 tons, and from New York for San Francisco during the same period 39,156 tons, showing that San Francisco utilizes the Panama route more than other cities on the Pacific coast.

The manager of one of the largest fruit canneries on the Pacific coast said that his company shipped annually about 35,000 tons of canned fruits and vegetables to the eastern part of the United States and Europe, and that the canneries of California used about 20,000 tons of tin plate per annum in the manufacture of fruit cans. He further stated that it was practicable to ship all of the tin plate by the way of Panama, and at least 80 per cent of the canned products of California, if rates were made to encourage commerce to move that way.

In a letter he says:

With an inducement in the matter of freight tariff and direct communication between Colon, Baltimore, Philadelphia, New York, and Boston, the larger part of this business, fully 80 per cent of the business done on the Atlantic seaboard, could be sent via Panama, assuming that the time in transit would not exceed thirty days and that the goods in transit will be sure of reasonably safe handling.

A very small part of this tonnage is transported now by the Panama route, and in answer to the question as to why more shipments were not made by that route he said:

The present uncertainty as to time of arrival and the bungling methods of handling trade * * * make it impracticable for us to ship via that route.

The rate on canned goods from San Francisco to the Atlantic seaboard and the Mississippi Valley is 75 cents per hundred pounds in carload lots. This applies to all points except the southeastern cities, to which rates are higher. The rates to Tampa, Jacksonville, Savannah, Charleston, and Atlanta are from 88 to 90 cents per hundred pounds, while the rate to New York and all North Atlantic cities is 75 cents per hundred pounds.

It is said that about 35,000 tons of canned fruits, vegetables, and salmon are exported annually from the Pacific coast ports to London

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and Liverpool. The shipments are made either by way of the Straits of Magellan or Cape Horn, or across the continent by rail to New York and by ship from New York. The producers with whom I conferred feel that if proper facilities existed a much lower rate could be made by the way of Panama, connecting with steamers at Colon for London and Liverpool, than across the continent by rail, connecting with steamships at New York. San Francisco now has far better facilities for shipment via the Isthmus than the other Pacific coast cities, but many of its business men allege that the Pacific Mail Company, being controlled by a transcontinental railroad, does not give their city all the advantages of cheap sea transportation to which it is entitled.

PORTLAND.

The principal articles exported from Portland, Oreg., are lumber, wool, grain, hops, salmon, green, dried, and canned fruits. About 10,000 carloads of lumber were shipped out of Oregon and southern Washington during 1904. It is not thought practicable to ship lumber from Pacific coast ports to the eastern coast of the United States or the Mississippi Valley by way of Panama, but it is feasible to ship hops, canned salmon, wool, dried fruits, and canned fruits. The Chamber of Commerce of Portland estimates (Exhibit J 4) that about 35,000 tons of these articles were exported from Oregon last year, and that a large part of this freight would have gone by the way of Panama if proper facilities had been offered at reasonable rates; that the railroad rates per hundred on dried fruits from Portland to the Atlantic seaboard are from \$1 to \$2.20; salmon from 75 cents to \$1.90; hops \$2, and canned fruits and vegetables from 75 cents to \$1.90; that practically none of this freight was transported by the way of Panama because of the rehandling at San Francisco, it being necessary to ship by a local line from Portland to San Francisco and there transfer to the Pacific Mail Company's steamers. The chamber of commerce further estimates that 150,000 tons of merchandise are received annually at Portland for consumption and distribution, and that about 2 per cent of this comes by the way of Panama, 8 per cent by the way of the Straits of Magellan, and 90 per cent by transcontinental railroads. There is no reason why more of this freight should not be shipped by the Panama route than by Magellan. On the Pacific coast of Central America and Mexico about 75 per cent of the merchandise from Europe and the United States is received by Panama and 25 per cent by Cape Horn and Magellan. If the shippers of western Mexico and Central America find it to their interests to route three-fourths of their commerce by the way of Panama as against Magellan, there is no reason why the same percentage of the sea commerce of the cities of the Pacific coast of the United States should not move the same way if equal facilities were offered.

In answer to the request to "state any objections that the commercial interests of Portland may have to the present rate-making system of the Panama Railroad Company," the chamber of commerce (Exhibit J 4) say:

It is our opinion that the rates now in force by the Panama route are so adjusted, as far as this port is concerned, as to draw the freight away from the Panama line and throw it to the all-rail lines.

Referring to the maintenance of a steamship line running from the North Pacific ports to Panama, the chamber of commerce (Exhibit J 4) states:

If a line were established and reasonable rates were adopted, there is no doubt in our mind that such a line would receive such ample patronage as to be able to maintain a weekly sailing list, to great advantage to themselves and to the citizens of this coast.

Mr. William D. Wheelwright, president of the chamber of commerce, in his letter transmitting the report of the chamber, adds:

You will not overlook the fact that all the business done for a series of years by way of the Isthmus has been done under a great disadvantage. The railroad company, having control of the Pacific Mail Steamship Company, has influenced the fixing of rates with a view to discouraging business, and what has been done under such circumstances is, of course, no criterion of what will be done if reasonable rates are made.

TACOMA.

The Chamber of Commerce of Tacoma, in its report (Exhibit J 5) states that the principal articles of export from Tacoma are lumber, lath, shingles, bullion, wheat, barley, flour, wheat starch, hops, apples, and salmon; that it is difficult to determine exactly what per cent is shipped by the way of Panama, the Straits of Magellan, and the transcontinental railroads, but as nearly as they can estimate about 1 per cent by the way of Panama; 59 per cent by the Straights of Magellan, and 40 per cent by rail; that it is impossible to estimate what per cent would go by the way of Panama if there were proper facilities, but, as they now exist, the necessity of transshipment at San Francisco and rehandling on the Isthmus make it impracticable to ship any quantity by that route, and that a very small part of Tacoma imports—probably less than 1 per cent—comes by the way of Panama and not to exceed 2 per cent by the Straits of Magellan.

The chamber of commerce, in closing its report, says:

The general sentiment prevailing with us appears to be that as long as the present arrangements with the Pacific Mail Steamship Company is operative the Panama route will be of little service to the North Pacific coast outside of California, and the remedy suggested is that our Government throw the ports and facilities on both the Atlantic and Pacific sides of the Panama Railroad open to the competition of all steamship lines willing to compete for freight to and from these points. * * *

By some the view has been forcefully advocated that our Government procure and assume control of a line of steamers to run between Panama and all North Pacific ports, thereby securing control of both an Atlantic and Pacific steamship service to operate in connection with the Panama Railroad, the object being to use this freight route as a lever to regulate any excessive rates charged by railroads on overland freight, a difficulty the solving of which appears to be a vexed question at this time. We would not care to definitely recommend this course, but it has its merits, and we believe is well worthy of our Government's full consideration.

Mr. William Jones, president of the chamber of commerce, in transmitting its report, adds:

There are shipped from Tacoma about 150 carloads of wheat starch per annum—80 per cent to the Atlantic coast and 20 per cent to the Mississippi Valley—at 75 cents per hundred carload lots. This could be shipped to advantage by way of Panama. * * * The starch is at its best about ninety days after the date of manufacture. Rehandling will not hurt it, except, of course, in cases of breakage. (Shipments are made in barrels.) The amount shipped to the Atlantic seaboard could easily be shipped by way of the Panama Railroad, provided satisfactory rates and through bills of lading could be obtained.

The Tacoma smelter shipped last year 9,850 tons of copper bullion to the refineries in New Jersey at \$14.50 per ton of 2,000 pounds in carload lots. This freight could be sent by the way of Panama; is cheaply handled; can not be injured by rehandling, the important

consideration being whether the amount of money the bullion represents could stand the loss of interest by reason of the additional time taken for the transportation.

* * * * *

There are shipped from the State of Washington about 4,500 tons of hops per annum—more than one-fourth from this city and county—and 80 per cent of the entire amount is shipped to Great Britain or Germany by rail via New York. Rate, \$2 per hundred to New York, \$2.60 per hundred to London.

Mr. Jones adds that with proper facilities this freight could, in his judgment, all be moved by the way of Panama.

SEATTLE.

There was less interest in Seattle in the subject of commerce via Panama than in any of the other Pacific coast cities visited. This city appears to be somewhat outside the zone of Panama influence. The chamber of commerce stated that some products, especially of iron and steel, could be advantageously shipped by way of Panama to Seattle. The conditions there are very similar to those at Tacoma, the cities being only 30 miles apart.

I left with the chamber of commerce a list of inquiries (Exhibit J 19) as to the amount of freight which originates in that vicinity for shipment, and also the amount received there, which could be successfully transported via Panama, but up to the time of submitting this report replies to these inquiries had not been received.

COMPLAINT AS TO TRANSSHIPMENT.

The Pacific Mail ships sailing from San Francisco south make their first stop at Mazatlan, Mexico. Between Mazatlan and Panama they stop at all the important ports of Mexico and Central America. Going north they call at the same Central American and Mexican ports, making Mazatlan the last, and from there sail direct to San Francisco. The Pacific Mail has traffic arrangements with other steamship companies, whereby freight received at Panama for any Pacific coast city of the United States other than San Francisco is reshipped at San Francisco to its destination, and freight originating at the Pacific coast cities to be exported via Panama must be shipped by other steamship companies to San Francisco, and there transhipped to the Pacific Mail. This transshipment at San Francisco is one of the chief sources of complaint by the shippers of Portland, Tacoma, and Seattle.

REPORT OF CONGRESSIONAL COMMITTEE.

The allegation is freely made by members of the chambers of commerce of a number of Pacific coast cities that the transcontinental railroads control the rates by the Isthmian route as effectually as they did in 1893, at which time there was a Congressional investigation as to the relations between the Panama Railroad Company and the Pacific Mail Steamship Company. The report of the Congressional committee which made that investigation is referred to in the communication of Maj. Gen. George W. Davis (Exhibit K). In this report it is alleged that before the interstate commerce law was enacted an organization known as the Transcontinental Railroad Pool paid the Panama Railroad Company \$75,000 per month for the privilege of fixing rates by that route; that in January, 1878, the

Panama Railroad entered into a contract with the Pacific Mail Steamship Company and that—

This contract provided that the Pacific Mail should have the exclusive right "to bill freight through" from New York to San Francisco, and vice versa, over the Panama Railroad, and all freight offered by others between these points could not be "billed through," but would have to pay local rates on the Isthmus railway.

The committee further says:

The sum paid for this was to be a lump sum of \$75,000 a month to the railroad company, which, by modification, was afterwards lowered to \$55,000 a month. A remarkable fact about this contract is that it was the result of a contract made before that time between the Pacific Mail Company and the Transcontinental Railway Pool, as at that date the Association of Transcontinental Railways was called. That was a contract whereby the Transcontinental Railway Pool, embracing all of the roads between the Missouri River and the Pacific seaports, and covering entirely all railway traffic between the Atlantic and Pacific seaboard, several of which had received large donations of public lands, and the bonds of which the United States Government was guaranteeing, paid the Pacific Mail the sum of \$90,000 a month, which was afterwards reduced to \$75,000 a month, for the consideration that the Pacific Mail would carry only 1,200 tons of freight each way a month between New York and San Francisco, and on that freight would allow the Transcontinental Pool to fix the price and rate to be paid. That was the upshot of the contract, although the form was a reservation of space for 1,200 tons a month for the exclusive benefit of the Transcontinental Railway roads, whether the steamer sailed full or half empty.

After the passage of the interstate commerce law had compelled the dissolution of the so-called "pool," a Transcontinental Railway Association was formed, which, under some name or other, is still in existence, and down to the present time the Pacific Mail, subsidized by the Government in a large amount each year, has been allowing the Transcontinental Railway to fix the rates and limit the traffic over its lines. These two contracts were so far practically parts of one and the same that the amount paid the Panama Railroad monthly was fixed with regard to that paid to the Pacific Mail by the transcontinental roads, and when the latter was lowered from \$90,000 a month to \$75,000, the former was lowered from \$75,000 to \$55,000. The object is frankly stated by the officers of both the transcontinental roads and the Pacific Mail. It was to maintain rates above the level to which they would fall if free competition between these several routes had continued. It seems to be certain that a very large, if not an absolutely controlling, interest in the stock and directory of the Pacific Mail Company is owned by individuals and estates very largely interested in the stock and directory of the transcontinental roads; and it is proven that the same individuals composing a majority of the directory of the Pacific Mail composed a majority of the directors present at the meeting of the Panama Railroad Company's directory at which the contract between Pacific Mail and the railroad company of February 1, 1878, was ratified and executed. That this system has for fifteen years been diminishing commerce between New York and San Francisco across the Isthmus is not denied. It is stated as a justification that the Transcontinental Railway Association, controlling, as it did, under these contracts, the prices and traffic of the Pacific Mail, used the latter as an active factor to defeat the competition of sailing vessels' traffic around Cape Horn, and thus were able to maintain the rates of the railroad companies as against that of sailing-vessel competition. It is obvious that this did not tend to increase American shipping or tend to the encouragement of the merchant marine or the commerce of the United States.

* * * * *

Your committee can not refrain from calling attention to what seems to be an obvious deduction from the facts shown: That it is the interest of the United States that the American people should absolutely control some outlet across the Isthmus, at some point which shall be used for the benefit of American trade in general as an open and continuous competitor, affording no opportunity for entangling subsidies from great competing lines or chance of falling into the grasp of any monopoly through stock manipulation.

(Signed)

JOHN R. FELLOWS, *Chairman.*
T. J. GEARY.
JOSIAH PATTERSON.
H. HENRY POWERS.
BELLAMY STORER.

When at San Francisco a number of citizens called my attention to this report, and stated that the Government now has an opportunity to carry out the recommendation which this Congressional

committee made, and that this railroad should now be made "an outlet across the Isthmus" for the benefit of American trade.

MR. SCHWERIN'S STATEMENT.

While in San Francisco I submitted to Mr. R. P. Schwerin, vice-president and general manager of the Pacific Mail Steamship Company, a number of questions (Exhibit L) relating to the complaints against the contract between that company and the Panama Railroad Company.

In answering, among other things, Mr. Schwerin said:

The Pacific Mail Steamship Company now maintains a regular schedule between San Francisco and Ancon, and it requires nine steamers to perform the regular service, as the distance between San Francisco and Ancon is 3,474 miles. These vessels now take freight from San Francisco to the ports of the following countries: Mexico, Guatemala, Salvador, Honduras, Nicaragua, Costa Rica, Colombia, and the west coast of South America. They also transact the local business between the ports of these countries and handle, via the Isthmus of Panama, freight from the west coast of the United States to ports of the Atlantic coast, ports of the West Indies, the northeast coast of South America, and Europe, including those of the United Kingdom, France, Germany, and the Mediterranean, and the company receives at Ancon from its connecting carriers return freight from the countries noted above, and also handles the local business between Central American and Mexican ports.

South of Ancon, on the west coast of South America, two lines of foreign steamers are in operation—the Pacific Steam Navigation Company, a British organization subsidized by the British Government, and the Compañía Sud-Americana de Vapores, a Chilean corporation, subsidized by the Chilean Government. These two lines do not operate north of Panama. There is also a German line, called the Kosmos Steamship Company, controlled largely by the interests of the Hamburg-American Packet Company, flying the German flag. This line operates steamers from Hamburg to ports on the west coast of South America via the Straits of Magellan, touching at Central American and Mexican ports, San Francisco, and Puget Sound ports, and on the return voyage to Hamburg touches at ports named, in a reverse order. This last-mentioned line is to-day a direct competitor with the Pacific Mail Steamship Company for all classes of its business, both north and south bound, excepting that which must be exclusively carried in American bottoms, i. e., freight originating on the Pacific coast of the United States and destined to the Atlantic coast of the United States and carried via the Isthmus, or vice versa. Its steamers sail side by side with us, loaded with American commodities for the Mexican and Central American countries, and transact the local business between ports of Mexico and Central America. It has to-day every advantage that the Pacific Mail Steamship Company has, with the exception that it takes its freight through the Straits of Magellan, and does not through bill via the Isthmus. This line carries freight and passengers. Their steamers are of a large freight-carrying capacity, chiefly manned and operated with foreign officers and Chileno crews. The officers are paid the wages out of Hamburg. From Hamburg to Valparaiso the crew is a skeleton German crew, and at the latter port Chilenos are taken aboard to make up the complement, and they are paid silver wages.

The Pacific Steam Navigation Company pay their officers British wages out of the port of Liverpool, and the crew are all Chilenos, at silver wages. The Compañía Sud-Americana de Vapores pays its officers and crew silver wages.

The service of the Kosmos Line has been somewhat irregular, and, as we have endeavored to operate our line with the greatest possible regularity, we have had the advantage in the carrying of freight and passengers up to the present. If, however, the Isthmus is thrown open and the South American companies extend their service to San Francisco or Puget Sound (and they have been offered an additional subsidy by the Dominion government to go to British Colombian ports), ship for ship, it is impossible for us to carry freight and passengers in competition with these three lines and live, as the Isthmus and the local business would be divided between four lines; and it is manifestly evident that the American line can not continue to exist, for the reason that not only is there not enough business for four lines, but, with the keenest economy of operation, the American line can not compete with its foreign competitors, in view of the increased cost of its operating expenses.

Referring to the increased expense of maintaining the American ships with American officers and American crews, as compared with the cost of operating a foreign ship, Mr. Schwerin offers as evidence a statement (Exhibit L) of the expense of maintaining the American

steamship *Acapulco*, with a gross tonnage of 2,572, as compared with the cost of maintaining the British steamship *Palena*, with a gross tonnage of 2,553. The total cost per month of maintaining the *Acapulco* was \$3,060, as against \$1,535.86, the cost of operating the *Palena*, a difference in favor of the British steamship of \$1,525.14, or \$18,289.68 per annum. He also offers a statement (Exhibit L) showing the cost of operating the American steamship *City of Sydney*, with a gross tonnage of 3,017, as compared with the cost of operating the Chilean steamship *Aconcagua*, with a tonnage of 2,761. The total expenses per month of maintaining the *City of Sydney* were \$3,230, while the expenses of maintaining the *Aconcagua* were \$1,048.88, a difference in favor of the Chilean steamship of \$2,181.12 per month or \$26,173.44 per annum. He offers a further statement (Exhibit L) giving the difference in the expense of operating the American steamship *Aztec*, with a tonnage of 3,508, as compared with that of operating the German steamship *Ramses*, with a tonnage of 3,582, showing the cost of the *Aztec* to be \$2,155 per month, as against \$878.75 per month for the *Ramses*, a difference in favor of the German steamship of \$1,276.25 per month, or \$15,315 per annum. The difference in the cost of maintaining these steamships consists in higher wages for the crews, higher salaries for the officers, greater cost of food for the crews, officers, and passengers, and larger expenses for repairs. To illustrate (Exhibit L): The captains on all three of the American ships are paid \$200 per month in gold, while the captain of the English ship is paid \$160 per month; of the Chilean ship \$112 per month, and of the German ship \$125 per month. A larger percentage of difference maintains for the subordinate officers. The seamen of the American ships are paid \$30 per month in gold, while the seamen of the English ships are paid \$7.65 per month; of the Chilean ship \$5.76 per month, and of the German ship \$16.25 per month. Mr. Schwerin states that the American seamen not only demand higher wages but better food, and therefore their maintenance is much more expensive than that of sailors upon foreign ships.

Referring to the rates that are charged at the Mexican and Central American ports, he says that they are very low, considering the expense incurred at those ports in loading and discharging cargo; that the facilities for handling freight are very poor, resulting in great waste of time; that ships costing hundreds of dollars a day to maintain are kept waiting by port officers, sometimes for days, for a comparatively small amount of freight; that if the business from these ports is divided between a number of competing lines the amount of freight each would receive would be so small that it would not justify maintaining a regular schedule service, and that the annulling of this contract will result in injury to the commerce of Central America and Mexico.

Mr. Schwerin adds (Exhibit L) that he has no objections to competition with American lines when conditions are equal, and that—

If the privilege of through bills of lading were given to all ships sailing under the American flag and withheld from ships sailing under foreign flags, the Pacific Mail Steamship Company would maintain a regular weekly service between San Francisco and Ancon, and continue to do so, making every effort to build up its line by obtaining as fast as possible American vessels of new and modern construction, which could be operated more economically, and of a type which could be operated through the canal upon its completion.

BUSINESS NOT DEVELOPED.

After carefully considering the statements made by the commercial bodies of the Pacific coast, the statement of Mr. Schwerin, and other data which have been called to my attention, it clearly appears that the Pacific Mail Steamship Company has made little effort to develop business between Pacific coast and Atlantic coast ports of the United States. It has not endeavored to secure traffic from Seattle, Tacoma, and Portland, three important commercial cities upon the North Pacific coast, and it passes by the port of San Diego without stopping. Mr. Schwerin states that there is not sufficient business at San Diego for the south and east by the way of Panama to justify ships stopping there and that the business available from the northern cities would not justify establishing a service direct between those points and Mexico, Central America, and Panama. This position is vigorously controverted by the shippers and the chambers of commerce of these cities. Members of the Chamber of Commerce of San Diego state, in support of their assertion that there is a large business from their city available for shipment by Panama that, during the week ended March 11, 1905, a vessel of the American-Hawaiian Steamship Line brought by the Straits of Magellan from New York to San Diego more than 3,000 tons of miscellaneous merchandise. It appears reasonable that a steamship line which finds it profitable to stop at numerous and unimportant ports of Mexico and Central America would find a larger and more profitable business available at the important commercial cities on the Pacific coast of the United States. The statistics furnished by the various chambers of commerce show that there is a large volume of freight which could with profit be moved via Panama at a much lower rate than that paid the transcontinental railroads, and it appears to me that these statistics further show that a large part of this commerce would go via Panama if facilities were offered. There can be no doubt but that if an effort had been made to secure business from the important Pacific coast ports a larger traffic would have been developed. The fact that the rates between the Atlantic and Pacific ports of the United States are based on the transcontinental railroad freight schedule, being a flat discount of 20 per cent from that schedule for carload lots and 30 per cent for less than carload lots, is evidence that there is a cooperation between the Panama route and the railroads in the fixing of rates. The character of the isthmian route is such that certain articles can be shipped much cheaper by that route than across the continent by rail, while upon others the difference in the cost would not be so great, and many articles can not be successfully shipped that way. So there does not appear any valid reason why the rate via Panama should be made differential. It is quite evident that if the Pacific Mail Steamship Company and the Panama Railroad Company had been engaged in a lively competition with the railroads for transcontinental business they would have had an independent rate schedule. While at present the control of Panama rates by the transcontinental railroads is not so specifically apparent as it was under the contract of 1878, as set forth in the report of the Congressional committee (Exhibit K), yet the effect of the present contract is practically the same, another method having been adopted to secure the desired results.

COMPLAINT AS TO POLICY ON ATLANTIC SIDE.

Complaint is made that the Panama Railroad Company has monopolized the traffic on the Atlantic side for its own steamships and refused to receive freight at Colon from competing lines, and that as a result the commercial interests of the Gulf cities have been greatly injured.

I visited the Gulf ports of Pensacola, Mobile, New Orleans, and Galveston, and conferred with the commercial organizations of these cities. These ports have never had facilities for the movement of commerce via Panama to and from the western coast of North and South America. The Panama Railroad Company has operated a steamship line from New York to Colon and refused to allow the use of the Isthmus to any competing line on the Atlantic side.

[NEW ORLEANS.

The Board of Trade of New Orleans complains bitterly of the discrimination by the Panama Company against the Gulf ports and in favor of New York. The New Orleans commercial organizations assert that a very large tonnage would seek an outlet through that port if facilities were available for shipment via the Isthmus to the western coast of North and South America. The products originating within the commercial radius of New Orleans for export are wheat, corn, oats, hay, all kinds of farm products, cement, coal, iron, manufactures of iron and steel, lead, zinc, lumber, cotton, petroleum, rice, sugar, salt, sulphur, cotton-seed products, etc. A market for a large amount of these products could be found in South and Central America and on the western coast of Mexico if transportation facilities existed. It is also asserted that, if opportunity were offered, large quantities of these products could be shipped to the Pacific coast of the United States by the way of Panama more cheaply than by the transcontinental railroads. The board of trade further alleges that the discrimination on the part of the Panama Railroad Company against New Orleans has had a far-reaching effect upon its commercial interests; that the distance from New Orleans to San Francisco is 2,456 miles, while from New York to San Francisco it is 3,237 miles, yet the freight rate on commodities is the same from New Orleans and New York to San Francisco, as indicated by the following schedule (Exhibit J 6):

Commodities.	New Orleans to San Francisco.	New York to San Francisco.
	Per cwt.	Per cwt.
Iron.....	\$0.75	\$0.75
Sugar.....	1.65	1.65
Coffee, green.....	.90	.90
Coffee, roasted.....	1.10	1.10
Rice.....	.55	.75

It appears from Exhibit J 6 that large amounts of cotton, sugar, rice, and general merchandise are shipped by rail from New Orleans to the Pacific coast, and that there are heavy shipments of matting, silks, tea, Japanese merchandise, wine, and canned and dried fruits from the Pacific coast to New Orleans; that a large part of this freight could

be routed by the way of Panama, and that if proper facilities existed there would be a readjustment of the transcontinental railroad freight rates so that New Orleans would be given advantage of the 781 miles shorter haul by rail to the Pacific coast ports which she is justly entitled to, but is now deprived of because she has not the facilities for cheap water transportation by the way of Panama.

Referring to the shipment of cotton to the Orient, the board of trade (Exhibit J 6) says:

Cotton is shipped to the Orient, but none of it via New Orleans. The most remarkable feature is that cotton, a southern product, is being forwarded to Tacoma, and thence to Japan and other ports of the Orient at rates which, at the present time, it would be difficult for New Orleans to compete with, owing to the fact that the rates via Colon and Panama to the oriental ports have been prohibitive.

The exportation of cotton, comparing the seven months ending March 31, 1904, with the same period for 1905, from Puget Sound shows an increase from 26,012 bales to 68,741 bales, indicating a heavy transcontinental movement for transshipment at our Pacific ports.

In this connection it may also be stated that the exportation of cotton from San Francisco for the same period shows an increase from 12,355 bales to 89,724 bales.

Continuing, the board of trade says that the natural movement of this cotton would be to New Orleans and from there by water to the Orient by the way of Panama; that the cost of the transportation of baled cotton by the Isthmus route would be much cheaper than to ship it thousands of miles by rail over high mountain plateaus to the Pacific coast and then reship to the Orient, and that commerce ought to have the opportunity of moving by the Panama route, that being the one of least resistance.

Referring to the steamship facilities existing at present from New Orleans to Colon, the board of trade (Exhibit J 6) says:

The present steamship facilities between New Orleans and Colon are those of a fruit line. This service can hardly be considered as comprehensive for the carrying of general cargo and passengers. While these fruit steamers, perhaps, have been able up to this time to fill the limited requirements of this trade, it is anticipated that, with the development and additional needs for canal construction, unless a proper general cargo steamship service is maintained between New Orleans and Colon, and thence via Panama Railroad to the western coast of the United States, Central and South America, New Orleans will be deprived of that share of the business which by right should come to her.

The passenger service has up to this time also been a cause of considerable complaint, as the fruit steamers, for reasons of their own, have discouraged the carrying of passengers during the summer time. This acted as a drawback to New Orleans, since passengers going to New York would supply their commercial wants in the East.

Recently the United Fruit Company has placed one general cargo boat, the steamship *Saphir*, in this market to ply between New Orleans and Colon.

A further disadvantage under which New Orleans is laboring at this time is the fact that the United States Government is running the Panama Steamship Line entirely from the port of New York, when it is claimed by New Orleans interests that it would be but fair to allot a part of this line to our city.

New Orleans has fine facilities for the handling of ocean commerce. Her wharves are under municipal control, and there is a fine depth of water to the river's edge. She not only has the advantage of river transportation for thousands of miles inland, but many of the great railroads of the Mississippi Valley make this port their southern terminus. The board of trade asserts that all her business men ask is that she be given an opportunity to utilize to the fullest extent her natural advantages.

Mr. E. A. Drake, secretary of the Panama Railroad Company, in referring to the complaint of the New Orleans Board of Trade, says that at one time the Panama Railroad chartered a ship and put on a

service between New Orleans and Colon; that the Southern Pacific Railroad immediately cut the rates on products which could be successfully transported by the way of Panama; that after the ship had made one round trip the merchants who had sought to have the line established withdrew their patronage and availed themselves of the reduced rate of the Southern Pacific, and that the Panama Railroad then withdrew its ship for lack of patronage. This statement of Mr. Drake evidently relates to the matter referred to in the following paragraph from the report of the New Orleans Board of Trade (Exhibit J 6):

While on the subject of Panama transportation, it brings to mind the experience the wholesale grocers, liquor dealers, and other interests had with the Southern Pacific Company several years ago, when the dealers here concluded that the rate from San Francisco, in carload lots, of 75 cents per hundred pounds, was excessive and exceedingly so. The merchants at the time took the bull by the horns and had the wine transported from San Francisco to Panama by steamship, and thence to New Orleans, at a rate of 45 cents, as against the 75-cent rate of the Southern Pacific, all rail.

While the wine was en route by this vessel the Southern Pacific reduced their rail rate to 45 cents to meet the steamship rate. After the wine reached here the Southern Pacific raised their rate again to 50 cents, and finally, after the boat was withdrawn, back to 75 cents.

In the meantime the jobbers thought the Southern Pacific would protect the recently reduced rate, but, as stated above, when the ship was withdrawn the Southern Pacific put their rate back to 75 cents on carload lots, and have not deviated from this rate ever since.

MOBILE.

Mobile exports the same character of goods as New Orleans, but she has never had facilities for the shipment of her products to the western coast of North and South America by the way of Panama. The chamber of commerce of Mobile states that there is a large amount of cotton products and raw cotton destined for the Orient which is transported from that vicinity to Seattle, Portland, and San Francisco, and from there reshipped by steamer to China and Japan, and that a large volume of canned goods, such as salmon, canned fruits, California wine, and dried fruits, is shipped from the Pacific coast of the United States to Mobile for distribution. The president of the chamber of commerce states that it would be practicable to ship a large part of this freight by the way of Panama, but that proper facilities have not existed because no steamship line running out of Mobile was able to make traffic arrangements with the Panama Railroad for transfer of its cargo across the Isthmus. The fact that transcontinental rates on canned goods from California to many of the interior southern cities and cities on the Gulf and the South Atlantic seaboard are higher than to New York and other eastern ports bears out the statements made by the shippers of the southern cities that high rates are maintained because facilities via Panama are denied.

The president of the chamber of commerce (Exhibit J 7) says:

In my judgment the handling of cotton and cotton goods to the Orient and foreign countries could be greatly increased or stimulated with improved shipping facilities by Panama. Furthermore, the products of the Pacific coast ports of Mexico, Central and South America could be stimulated and largely developed by the port of Mobile for the interior. For instance, such as nitrate of soda, which comes from Chile, coffee, and woods of value that now have to be moved by water around Cape Horn, if they move at all. The coal, iron, and timber industries are susceptible of large development to the west coast, principally of Central and South America, and proper shipping facilities and reasonable rates are only needed to promote its successful handling.

The Mobile Chamber of Commerce strongly urges the opening of the Panama Railroad for transportation of freight across the Isthmus to all competing lines on the Atlantic side, and says:

I am informed that there are companies which would establish an American steamship line, maintaining a regular service between Mobile and Colon, if they were given the privilege of through bills of lading from Mobile and interior points in connection with connecting lines to the Pacific coast ports of the United States by way of Panama and for Panama with connecting lines on the Pacific coast.

Mr. Drake says that at one time, years ago, an effort was made to have a line run from Mobile to Colon, but that it was not successful.

Mobile claims that within a short time she will be able to place first-class steam coal on board ships cheaper than can be done in any port in America.

PENSACOLA.

Pensacola has one of the best harbors in the United States and fine facilities for the handling of ocean commerce (Exhibit J 8). No commerce has passed through this port for the western coast of North and South America by the way of Panama. It is claimed by the chamber of commerce of Pensacola that coal can be loaded into ships cheaper from her wharves than from any other port in this country, and that her railroad reaches into a very productive part of the Mississippi Valley and the South; that it would be greatly to the interest of her commercial development if she had facilities for the movement of the products of this region to Colon and to the western coast of North and South America by the way of the Isthmus. The same general conditions exist here as at the other Gulf ports.

The interests of the Gulf ports of the United States in commerce by the way of Panama are very great, as indicated by the statements of their chambers of commerce and boards of trade. The north and south railways of the Mississippi Valley penetrate the most productive regions of our country. Their grades are very slight, and the natural current for the transportation of the products of this valley is toward the Gulf. I have conferred with many men who have studied the movements of commerce, and it is their opinion that an enormous tonnage of the products of the Mississippi Valley will find an outlet through the Gulf ports to the west coast of North and South America and the Orient if efficient facilities for transportation via the Isthmus are given. Expert traffic men advise me that freight originating in the Mississippi Valley south of Cincinnati, St. Louis, and Kansas City can be transported more cheaply to the Pacific coast of the United States by the way of the Gulf and Panama than across the continent by rail, over heavy grades and high plateaus. The coal and iron productions of Alabama are very great. The mines are but a short distance from the ports of Pensacola, Mobile, and New Orleans, all of which have fine harbors for handling ocean commerce.

GALVESTON.

While Galveston is not a city of large population, yet her port is one of the most important in the country. It is the nearest deep-water harbor to the western half of the Mississippi Valley. An enormous amount of merchandise passes through Galveston—outward bound freight for New York, Europe, and South America, and

homeward bound freight for distribution to the large interior cities of the country, such as Dallas, Houston, Fort Worth, Denver, Kansas City, and others. A large percentage of the products of Texas, Kansas, Arkansas, Missouri, Oklahoma, and Indian Territory finds an outlet to the markets of the world through the Galveston harbor. Heretofore no facilities have been offered for the transportation of any of these products across the Isthmus of Panama. Hundreds of thousands of tons of commerce are transported annually from San Francisco to Galveston and from Galveston to San Francisco by rail and then reshipped to other points. I was informed in San Francisco that every year thousands of tons of sugar from the Hawaiian Islands are unloaded at San Francisco and shipped by rail to Galveston, and from there by steamship to New York. Exhibit J 9 shows that this shipment of sugar last year amounted to 127,000 tons. Large quantities of general merchandise are shipped by steamer from New York to Galveston and reshipped by rail to San Francisco. If it is feasible to make such shipments with profit it would be far more profitable to ship via Panama. There is no great difference in the water distance from New York to Colon and from New York to Galveston, and the cost of transportation of freight across the Isthmus, 47 miles by rail, and from Panama to the Pacific coast ports by water would certainly be much less than from Galveston to San Francisco overland, a distance of about 2,000 miles.

I have been advised that there are steamship companies that will establish a regular schedule service to Colon from Mobile, and possibly from Pensacola, New Orleans, and Galveston, if facilities for properly handling their cargo are available.

COMPLAINTS AS TO CARELESS HANDLING OF MERCHANDISE.

Referring to the complaints that goods shipped by the way of Panama are frequently damaged by careless handling and that losses occur by theft, it appears that many of these complaints are well founded. A number of shippers on the Pacific coast give this as the reason for not taking advantage of the 20 per cent reduction in rates from the transcontinental railway schedule. The reports of South American consuls and consular agents (Exhibit D) show that there is almost universal complaint against the careless and indifferent handling of goods shipped by the way of Panama; that losses by damage and theft are numerous, and that there is great delay in the adjustment of claims.

The character of labor that can be secured at Colon and Panama is not of a high order, and while the local management of the road has doubtless endeavored to properly protect the interests of its patrons, yet it has not always been able to do so as completely as it should have done. In talking with the acting superintendent and other subordinate officials, they informed me that at times the stevedores would intentionally let accidents occur, such as the bursting of a barrel of wine, hoping to appropriate to themselves a portion of the contents before it all disappeared. Indeed, such accidents at one time became so common that a severe rule against the employees drinking any wine from a bursted barrel had to be enforced, and they were further forbidden to appropriate a part of any kind of damaged merchandise. With improved facilities for the handling of freight, a strict discipline

over the laborers, and more prompt settlement of damage claims these complaints will be greatly reduced.

CONGESTION OF BUSINESS.

The complaints as to the congestion of business and the injury to commerce resulting therefrom also appear to be justified. While I was at Colon and Panama a larger amount of commercial freight was being landed at the wharves from ships than the railroad could properly take care of and at the same time handle the pressing work of the Canal Commission. Chief Engineer Wallace was devoting himself with great energy to the organization of the canal work. He fretted under delays incident to the securing of machinery and supplies from the States, and when the supplies were finally unloaded from the ships at Colon he insisted that the railroad give the transportation of such supplies immediate attention, holding that the expense of delay to the United States Government was vastly greater than the injury to commerce that might occur from the delaying of a few cargoes of merchandise. The shipper, however, is more interested in the prompt movement of his freight and the delivery of it at its destination upon schedule time than he is in the general subject of the Panama Canal construction, and the steamship lines and their agents are naturally irritated over complaints from shippers of delays. I have been advised that a Pacific Mail ship was recently delayed at Panama several days beyond sailing date because of the congested condition of the business of the railroad.

That the congestion complained of is increasing is evident from the letters of S. Sandberg, captain of the steamship *City of Panama*, and George R. Brown, captain of the steamship *City of Para*, submitted herewith. Captain Sandberg complains (Exhibit L 2) that he was unable to unload his ship at La Boca pier because the railroad could not receive the cargo; that while he was detained at La Boca he on—

Sunday, April 23, made a trip to Colon, and en route noticed a number of flat cars loaded with coal and sidetracked at the various sidings, this being for the use of Canal Commission; also a large number of box cars filled with supplies and materials for the canal awaiting unloading. While at Colon, visited the Panama Railroad Company wharf and found same completely choked and blocked with cargo destined for Pacific side of Isthmus; * * *

The steamer *Orizaba* was lying at the wharf in Colon, and I went on board and interviewed the captain. We talked over affairs on the Isthmus, and he told me he had arrived at Colon on the morning of April 19, and it was then Sunday, April 23, 3.30 p. m., and his hatches had not yet been taken off.

He had 2,300 tons of cargo on board, and the steamship *Seguranca* was due the next day with 2,500 tons of cargo.

In conclusion I would state that the necessities of the Canal Zone in the matters of freight and the transportation of material has practically resulted in withdrawing about one-half of the rolling stock formerly available for handling cargo across the Isthmus, with the result that the Panama Railroad Company are utterly unable to furnish the service we require in order to dispatch one of our ships every week.

Captain Brown, of the *City of Para*, in Exhibit L 2, confirms the statements made by Captain Sandberg, and further adds:

The day I was at Colon the *Orizaba* had been in port four days, and not one package of freight discharged; yet the railroad officials wanted her freight to come forward in this ship.

In conclusion, I will state, never before since I have been in the employ of the Pacific Mail Company have I ever seen or heard of such a terrible mixed-up mess in freight on the Isthmus as I saw last April during the two weeks' stay at La Boca pier.

The Government is under just as great obligations to keep open this route of commerce and to handle promptly and efficiently cargo

intrusted to its care as it is to press the work of canal construction, and every possible effort should be made by the Panama Railroad Company not only to fulfil its obligations to the Canal Commission, but to commerce as well, and whatever improved facilities are necessary to enable it to do this should be immediately provided.

THE TELEGRAPH LINE.

Under the concession from the Colombian Government the Panama Railroad has the exclusive right to construct a telegraph line across the Isthmus. The rate formerly charged for messages was \$1 for 10 words, and 10 cents for every additional word. Complaint was made that this charge was excessive, and on February 1, 1905, the rate was reduced to 25 cents for 10 words and 2½ cents for each additional word. But the cable companies have not reduced the price for cable messages from the United States across the Isthmus. Formerly the cable companies paid the Panama Railroad the regular rate of \$1 for every message of 10 words sent across the Isthmus; now they pay 25 cents, and 75 cents, the difference between the present and former rates, goes to the cable companies instead of to the Panama Railroad Company. The local patrons of the telegraph line have been benefited by the reduction in telegraph rates, but the citizens of the United States who have to use these lines in their commercial business have not been. The gross receipts of the telegraph line for the year 1904 (Exhibits B 33 and 34) were \$6,052.30, of which \$1,663.85 was for local business and \$4,388.45 was for through business. From this it appears that almost three-fourths of the business is through business and that the reduction of the telegraph charges has resulted in a loss to the revenues of the railroad, but has been of no benefit to the American public. Since this investigation began the West India and Panama Telegraph Company (Limited), an English line, has stated that it will reduce the rate on through messages equivalent to the reduction in the telegraph rate, but the Central and South American Telegraph Company refuse to make any reduction.

TEHUANTEPEC ROUTE.

The Mexican Government has constructed a railway across the Isthmus of Tehuantepec between the ports of Coatzacoalcos on the Atlantic side and Salina Cruz on the Pacific side. The purpose of this road is to handle transcontinental freight as well as local business. Being a railway constructed and owned by the Mexican Government, and its relation to commerce being so similar to that of the Panama Railroad, I concluded to land at Salina Cruz, examine the road, and consult with the Mexican authorities as to the policy which that Government had adopted in its operation.

This railway is known as the Tehuantepec National Railway, and has been in the course of construction for many years. The route was first examined by American capitalists as far back as 1850.

After repeated attempts, construction was actually begun in 1878, but the road was not completed until 1894, and has never been available to any extent for transcontinental commerce because of the shallowness of the harbor on the Atlantic side, caused by the bar at the mouth of the Coatzacoalcos River and the lack of harbor

facilities on the Pacific side. In 1898, however, the Mexican Government entered into a contract with the English contracting firm of S. Pearson & Son, Limited, of London, for the rebuilding of the road and the construction of two harbors, one at Salina Cruz and the other at Coatzacoalcos. In 1902 an additional contract was made with the same firm to operate the road and manage the harbors after they are completed. This contract is in the nature of a partnership between the Mexican Government and the firm of S. Pearson & Son, Limited, and runs for a period of fifty-one years from July 1, 1902. The contracting firm are the administrators or managers of the property, and the annual earnings are to be divided as follows:

(1) Payment of operating expenses, maintenance of track, etc., and formation of a reserve fund for repairs. (2) Payment of interest on loans. (3) Payment to the two partners of an interest of 5 per cent on the capital furnished by them. (4) Refundment of losses in previous years which were charged to capital. (5) Payment of interest at 5 per cent per annum on the capital devoted to the Coatzacoalcos port works. (6) The surplus to be divisible between the Government and the contractors as follows: During the first thirty-six years, 65 per cent to the Government and 35 per cent to the contractors; during the next five years, 68½ per cent to the Government and the balance to the contractors; during the next five years, 72½ per cent to the Government and the balance to the contractors; in the last five years, 76½ per cent to the Government and the balance to the contractors.

I landed at Salina Cruz on the 5th of March. Sir Weetman Pearson, the head of the firm, was on the Isthmus at the time, and he received me with marked courtesy and offered every facility for a thorough examination of the railroad and harbor works.

What promises to be a very fine harbor is being constructed at Salina Cruz, the Pacific terminus of the railroad. The harbor at present is a small inlet or bay and subject to hard storms and heavy seas. When completed it will be protected by two breakwaters that extend, one about two-thirds and the other about five-eighths of a mile into the bay, the outer ends of the breakwaters reaching a depth of 60 feet. These breakwaters protect what is called the outer harbor, the depth of which is from 35 to 60 feet. There is also an inner harbor, or basin, covering an area of about 50 acres, which, when dredged as planned, will have from 32 to 40 feet of water. The inner and outer harbors are separated by a dividing wall, and wharfage facilities are being provided that will accommodate twenty steamers at a time. A dry dock is being constructed which will be about 600 feet long, 95 feet wide, and 34 feet deep. Many large warehouses are planned to be built, and the facilities for loading and unloading cargo will be of the most modern character.

On the Atlantic side at the mouth of the Coatzacoalcos River another very fine harbor is being prepared by the construction of jetties so as to scour the bar at the mouth of the river to a depth of 35 feet. There is about 40 feet of water in the river next to the wharves of the present port of Coatzacoalcos. These wharves are being very greatly improved and extended. Over 2 miles of warehouses along the river front and extensive railroad terminals are being constructed.

It is the purpose of the contractors to utilize every modern facility for cheapening the discharge and loading of freight from ships to cars and from cars to snips with a view of making this route an important link for transcontinental commerce. Sir Weetman Pearson believes that the Tehuantepec Railroad will be able to handle through

business at so low a rate per ton that it will be economy for the steamship lines transporting commerce of the Mississippi Valley to use this route rather than to sail the distance that will be required to go through the Panama Canal. He expects to have the harbors ready for the accommodation of ships by July 1, 1906, and believes that at times it will be impossible for the Panama Railroad to handle its commercial business successfully and at the same time do the work required in the construction of the canal. He is therefore making a special effort to have the Tehuantepec National Railway ready to take care of the commerce which, in his judgment, the Panama Railroad will be unable to handle. The enterprise of the Mexican Government in the construction of these magnificent harbors and this railroad is highly creditable. The route will exercise a great influence on the commercial development of southern Mexico, and will become a strong competitor of the Panama Railroad for commercial business; but it is not the opinion of experienced men with whom I have talked that it can ever successfully compete with the canal.

President Diaz, at the request of Ambassador Clayton, directed that I be given every facility for examining the railroad and ports, and I am under special obligations to Sir Weetman Pearson and his associates, to Hon. Leandro Fernandez, minister of communications and public works, and his representative, Engineer R. T. Jordan, who accompanied me across Tehuantepec, for courtesies extended while in Mexico.

POLICY FOR MANAGEMENT OF RAILROAD.

In the foregoing I have endeavored to consider as concisely as practicable the complaints that have been made against the present policy of the Panama Railroad. The discussion of these complaints has shown the relation this railroad sustains to trade between the Atlantic coast of the United States and the western coast of the United States, Mexico, Central and South America.

The question as to the policy that should be pursued by the Government in the management of this road should be considered from three points of view:

First. Should the railroad be closed to commerce, and used simply as a construction road for canal work?

Second. Should it be used both as a construction and as a commercial road, making commerce incidental and secondary to the canal work?

Third. Should it be used not only as a construction road, but also as a commercial line to its fullest capacity?

Referring to the first proposition, as to whether the railroad should be used exclusively for canal construction and not for commercial business, this railroad has for fifty years been operated as a commercial line. It has served as a link connecting the commerce of the two oceans. During that time hundreds of thousands of tons of merchandise have been transported across the Isthmus every year, and it would be a great injury to the commerce not only of our country but of Central America, South America, and Europe to close this Isthmian route. Such a policy would be specially injurious to the commercial interests of the Pacific coast of the United

States, Mexico, and Central America. Furthermore, the concession under which the railroad was constructed provides that—

In consideration of the collection and receipt of the duties and rates of transportation fixed by it, the company binds itself always to effect with care, punctuality, and celerity, and without exception as to national character, the transportation of travelers, cattle, merchandise, goods, and materials of all kinds which may be confided to it. * * *

I do not think that the closing of the road to commerce can be given serious consideration.

The second proposition, namely, that its commercial status should be maintained, but that commerce should be handled only incidentally, has many adherents. This policy is advocated by those who believe that while the route ought not to be closed it should not be improved or developed as a commercial line by the United States Government. They state that it is not the business of the United States to engage in a commercial enterprise or to conduct a transportation company, but since the Government came into possession of this road as an incident to the purchase of the French Canal property, it may be well to continue its commercial status with its present facilities, but that the Government should not in any way enlarge it as a commercial line. Those who advocate this policy declare that the steamships should be sold.

Then there is the third proposition, that since the Government is required to operate this road as a commercial line it ought to improve its facilities so as to make it the greatest benefit to commerce.

The relation that the Panama Railroad sustains to commerce is different from that of any other transportation company. The United States Government is constructing a canal across the Isthmus of Panama at very great expense, and the benefit that will accrue to commerce is one of the principal reasons for undertaking this great enterprise. This railway is at present performing in a meager way the commercial functions that will be performed by the canal. If the United States Government is justified in expending a large amount of money for the construction of a canal for the benefit of commerce, then it is justified, pending the construction of the canal, in operating this railroad for the same purpose. The road was acquired as a part of the French Canal property. Seven million dollars was agreed upon as its value, and its commercial importance must have been one of the considerations in fixing the price. The operation of this railroad is required in order to keep open a long established route of commerce. Since, therefore, it is necessary for the Government to operate the road as a commercial enterprise, why should it not improve its facilities so as to enable it to handle commerce in the most efficient manner? It is estimated by the engineers that it will be from ten to fifteen years before the canal can be open for use. In the meantime the railroad must perform in a limited way the commercial functions of the canal. It therefore appears to me that the railroad should be equipped so as to perform efficiently those functions, having in mind a reasonable expenditure for improvements that are to be used only for a period of ten or fifteen years.

The wharfage facilities both at Colon and Panama are inadequate, but wooden wharves that will last as long as they will be required can soon be constructed. The road should be reequipped with rolling stock, and improved facilities provided for the handling of cargo

from ship to car and from car to ship. At present it requires from two to four days to unload a vessel of 2,000 or 2,500 tons. Without very great additional expense, facilities can be provided that will enable ships to discharge in less than half that time. With these improved facilities freight could be handled much cheaper and with much less damage, and the road can be made of far greater advantage to commerce than it has been in the past.

The operation of this railroad is no more in competition with private enterprise than is the construction of the canal in competition with private enterprise. By constructing the canal the people of the United States believe that the exchange of commodities between the eastern and western coasts of our country will be greatly cheapened. If products can now be transported between the Atlantic and Pacific coasts by this railroad at less cost than in any other way, then commerce should not be deprived of the full advantage of this route.

THE STEAMSHIP LINE.

The railroad owns the steamship line, and what should be done with the steamships is one of the questions which I was specifically directed to consider.

Heretofore the Panama Railroad Company has conducted its business as a private corporation. Its steamship connections have been formed with a view wholly to the financial interests of the corporation. It therefore entered into the contract with the Pacific Mail Steamship Company, heretofore discussed, with a view of making what it considered the most profitable traffic alliance practicable on the Pacific coast. Its directors evidently concluded that it was better business policy to cooperate with the Pacific Mail, in competition with other steamship companies operating north of Panama, than to compete with it. They doubtless thought it more desirable to fix differential rates 20 and 30 per cent below those of the transcontinental railroads than to make an independent schedule. On the Atlantic side it has maintained for its own steamship line monopoly of all business between the United States and Colon. It evidently thought such a policy would be the most profitable to the stockholders. It is a common opinion, however, that if traffic from competing steamship lines had been invited, especially on the Pacific coast, the railroad equipped with modern rolling stock, and the terminal facilities improved and enlarged it would have handled a much larger and more profitable business. Why it has operated a steamship line only from New York it is difficult to understand. It seems to have made one or two feeble efforts to operate lines from New Orleans and Mobile, but they were soon abandoned. There certainly was a fine opportunity for the development of business between the Gulf ports and Colon.

From the statistics herewith submitted it appears that over 100,000 tons of Hawaiian sugar are unloaded annually from ships at San Francisco, transported across the continent to Galveston, and reloaded into ships there for New York. If proper facilities existed at Panama for handling this freight it certainly would be cheaper to ship it direct from Hawaii to Panama, transport it 47 miles across the Isthmus by rail, and then by ship to New York, instead of transporting it from San Francisco to Galveston, 2,000 miles by rail, and from there by water to New York, a distance about as great as from

Colon to New York. If it is profitable for the transcontinental railways with their connecting steamship lines to transport cotton from the producing centers of Georgia, Alabama, Mississippi, and Louisiana for thousands of miles over high mountain ranges to Seattle or Tacoma and reship from there to China and Japan, it certainly would be more profitable for the Panama Railroad to take cotton at the Gulf ports within a short distance of where it is produced and transport it by the way of Panama, connecting with steamships bound for the Orient. This probably would not be practicable if cotton were the only product handled, because there would not be sufficient business to justify the establishment of a steamship line for handling this one product; but if it is cheaper for cotton it is for many other products, so that a regular route of trade would be established. The transcontinental rate schedules plainly show that a very heavy tonnage of manufactured iron could be more cheaply shipped from points in the Mississippi Valley and the South to the Pacific coast by Panama than by rail, yet apparently the Panama Railroad has not sought this business. It also appears that many thousands of tons of canned fruits, dried fruits, and other products of the Pacific coast are transported by rail to the Atlantic seaboard, and that if facilities were provided large quantities of this freight could be moved more cheaply by the way of Panama. It may be that the Panama Railroad did not have the financial strength to invest in steamships and to improve the road so as to enable it economically to handle this commerce, or that its commercial environment was such that its officers did not desire to pursue such a policy. The Government of the United States, however, is not affected by such considerations, and sustains an entirely different relation to the Panama Railroad as a commercial route. It is operating this road for the benefit of commerce and not for the purpose of earning the largest dividends for the stockholders. It should therefore equip the road to handle efficiently all business that would move that way as a result of natural conditions.

DISPOSITION OF THE STEAMSHIPS.

The question as to what should be done with the steamships is more perplexing than as to what policy should be pursued in the management of the railroad; but it must be borne in mind that the Government will have a very large amount of its own freight to transport to the Isthmus during the next ten years. If it should sell the ships and discontinue the line, as is advocated by some, it would then have to depend upon private steamship companies for its own extensive passenger, freight, and mail service. During this era of combinations it would not be difficult for steamship companies to enter into an agreement as to rates, and charge excessive prices. It has been suggested in this connection that the Government could make a contract at special rates for its canal business. The character of the canal freight, the amount required, and the time when it will have to be transported are problematical, and under the circumstances it does not appear to me that it is at all practicable to anticipate this business with sufficient accuracy to enable steamship companies to bid intelligently, nor would the Government be justified in making a contract at this time for its transportation. What would be reasonable rates for the work when it

will have to be done could not now be determined. The steamship line has been operated at a profit for twelve years. No other regular service exists between the Isthmus and the United States. The maintenance of this line can not, therefore, be injurious to any established private steamship company, and its continuance insures to the Canal Commission cheap rates and a regular weekly mail service.

It does not appear, however, that the United States Government should refuse to permit any steamship line which desires to establish a schedule service between Colon and any port of the United States the use of the road to transport its cargo across the Isthmus to a connecting line on the other side. So that the policy which has heretofore been pursued, of denying the use of the road to competing steamships, should be discontinued and facilities offered to any line that desires to establish service between any port of the United States and Colon.

The commercial cities on the Gulf are exceedingly anxious for the establishment of a regular steamship service between the Gulf ports and Colon, and it clearly appears that not only the interests of commerce, but the interests of the Government itself, require that such a service be established. A very large tonnage of products of the Mississippi Valley and the Gulf States will be used as supplies in the construction of the canal, not only for the maintenance of the employees, but for construction purposes. It certainly is cheaper to move the products of the Mississippi Valley and the South to Colon by way of the Gulf ports than via New York. An effort, therefore, should be made to induce some American company to establish a first-class line of passenger and freight steamers running between the Gulf ports and Colon. From Exhibit C it appears that about 20,000,000 tons of freight will be required by the Canal Commission, a large part of which will originate in the Mississippi Valley. Therefore, if within a reasonable time ample steamship facilities have not been provided by private companies, the Government should require the Panama Railroad to establish a line for the movement of canal supplies from the Gulf ports to Colon.

RELATION BETWEEN STEAMSHIP LINE AND RAILROAD.

The relation that should exist between the Panama Railroad and the steamship line depends largely upon the policy pursued in the operation of the ships. A number of the greatest American steamship lines are controlled by railway systems. The Great Northern Railway and the Great Northern Railway Steamship Line are under the same management. Because of this combination of railway and steamship lines, rates have been made that result in the transportation of cotton from the very shores of the Gulf of Mexico to Seattle and from there to Japan and China. The rate from Dallas to Hongkong via Seattle is \$1.35 per hundred pounds. This includes rail transportation for about 2,500 miles, cost of transfer from cars to ship at Seattle, and shipment by water for about 5,000 miles, while the rate from Dallas to New Orleans, an exclusive rail haul of 497 miles, is 70 cents per hundred, or more than half the China rate. The natural movement of this commerce would be south to Galveston and west by the way of Panama to the Orient. The Southern Pacific Railroad controls a steamship line running between

Galveston and New York, and as a result of this combination of the railway and steamship lines under one management, freight is handled from San Francisco by rail to Galveston, and from Galveston by water to New York. The cheaper route for this freight would be by the way of Panama, if there were modern facilities for handling cargo. If the Panama Steamship Line is to be run for the benefit of commerce, then it should not discard the advantages that accrue to it by virtue of its traffic connection with the Panama Railroad, because that connection can be used effectively in the fixing of through rates. If, however, the steamships are to be operated as a local line for canal business between New York and Colon, and only handle commerce incidentally, then its connection with the railroad is not of great importance.

CAN AMERICAN SHIPS BE FAVORED.

Referring to the Pacific Mail Steamship Company contract, it appears to me that the Government can not give a privilege to one steamship company and decline the same privilege to another. I feel, however, that there is great weight in Mr. Schwerin's argument, wherein he claims that an American steamship line is unable to compete with a foreign line because of the greater expense of building, maintaining, and operating an American ship. Coastwise trade—that is, trade between the Atlantic and Pacific seaboards—must, by our navigation laws, be carried in American bottoms; but trade between Mexico and Central America and New York is not coastwise trade. By virtue of this contract the Pacific Mail Steamship Company has been able to handle about 75 per cent of the business of Central America and Western Mexico. The rates for this business have been comparatively reasonable, and as a rule the facilities furnished good. Mr. Schwerin asks, if the contract with the Pacific Mail is annulled, that through bills of lading north of Panama be given only to American registered ships, saying that he is willing to meet competition upon equal terms, but that, on account of the larger cost of maintaining American ships, he can not continue the present schedule service and compete with foreign lines. I would be glad to see American ships favored when it can consistently be done, but the treaty by which the canal is constructed (Exhibit M) contains the following provision:

The canal shall be free and open to the vessels of commerce and of war of all nations observing these rules, on terms of entire equality, so that there shall be no discrimination against any such nation, or its citizens or subjects, in respect of the conditions or charges of traffic, or otherwise. Such conditions and charges of traffic shall be just and equitable.

Upon the theory that the railroad is performing the functions of the canal, in so far as a railroad can do so, it does not appear practicable to show any discrimination at the ports of Colon and Panama in favor of American ships.

FIXING RATES FOR THROUGH BUSINESS.

Two policies have been suggested for fixing freight rates on through business. One, to make a flat rate for all business received from any steamship or sailing vessel. The other, to charge a per cent of the through rate. The first plan contemplates no traffic arrangements with steamship lines. Under this policy any freight unloaded on the wharves at either end of the railroad would be transported across the

Isthmus for a certain sum per ton. The railroad company would have no concern as to what steamship landed the freight on one side or received it on the other, and would have no interest in the rate charged by the connecting steamship lines. By this policy it would have no voice in determining the rates for transcontinental or through business. The principal danger to commerce from such a policy would be a combination of steamship lines that would maintain the present rate-making system concerning which the shipping public so vigorously complain. Mr. R. L. Walker, traffic manager of the Panama Railroad Company, is inclined to think (Exhibit F 5) that there would be an agreement between lines, and that any reduction in transfer rates made by the Panama Railroad would be absorbed by the steamship lines, as was done by the cable lines when there was a reduction in the price of telegraph messages. It is true that the steamship lines have not the same opportunity to maintain excessive rates that the cable lines have because there is the tramp steamer, which, as a rule, is industriously hunting cargo at all important ports, but the tramp steamer would be at a disadvantage with the regular lines in handling transisthmian commerce, in that it would have no connecting carrier on the other side, and it would suffer loss by its cargo having to lay on the Isthmus waiting for a ship to receive it.

The second policy suggested—that is, to charge a per cent of the through rates—is more complicated and necessitates traffic arrangements with all connecting lines on both oceans. Under this system the Panama Railroad would have a voice in the fixing of through rates, and could use this power effectively in preventing unjustifiable inequalities and discriminations. This policy, with a proper minimum fixed, would unquestionably be the more profitable to the company, as it would receive a per cent of the through rate, and therefore participate in the profit of any desirable business that might be secured by its connecting lines, while by the first policy it would receive only a toll for transfer. By retaining a voice in the making of through rates the railroad could prevent demoralizing rate wars by one line upon another for the purpose of destroying competition. By the second policy the Panama Railroad assumes much greater responsibility, as it would become a cocarrier, while by the first policy it would serve only as a transfer company. If the policy of a flat rate is adopted, a schedule should still be provided, because no single rate can be equitably applied to all classes of freight. There is another feature of the question that should not be overlooked; that is, the Government has a steamship line running between New York and Colon which its interests require it to maintain, and it is also under obligations to continue this as a commercial line. A very large part of the traffic of this line has been through business, and it is necessary, therefore, for it to have connecting lines on the other side; otherwise not only will the commerce which has been moving across the Isthmus be blocked, but the revenues of the line seriously reduced. Not only the interest of transisthmian commerce but that of the steamship line requires that there be traffic arrangements by which freight entrusted to it for shipment will be promptly delivered to connecting carriers on the other side.

It would appear, therefore, considering the interests of the steamship line, the railroad, and commerce in general, that for the present, at least until the Government is enlightened by a wider experience,

REPORT OF JOSEPH L. BRISTOW.

47

the wiser policy would be to conduct both the railroad and steamship line as cocarriers, forming traffic connections with other transportation companies.

SCHEDULE SERVICE TO PACIFIC PORTS.

It is very important that there should be a schedule steamship service maintained between the Pacific ports of the United States and Panama. The Government is interested in having ample facilities for the transportation of mail, passengers, and supplies from the Pacific coast to the Isthmus during the period of canal construction. The present mail service by the Pacific Mail Steamship Company is poor, caused by the long delays of the ships in Mexican and Central American ports. It now requires three weeks to go from San Francisco to Panama when the trip should be made in ten or twelve days. If a steamship line could be established making all the important Pacific coast ports between Puget Sound and San Diego, sailing direct from San Diego to Panama, it would be of great advantage to the work of canal construction by furnishing means for direct transportation of supplies needed from the Pacific coast, and it would also be of great benefit to commerce.

RECOMMENDATIONS.

In conclusion, therefore, I would recommend:

That the Panama Railroad be continued as a commercial line; that its facilities for handling commerce be improved at once; that it be double tracked, and reequipped with modern rolling stock; that its port facilities be enlarged by the construction of additional wharves, and that modern facilities for handling cargo be provided.

That a schedule of rates for through business be provided, fixing the charges at the minima which the payment of operating expenses and a fair dividend on the investment of the Government will permit. The cost of handling the freight with the improved facilities, and not what it has cost in the past, should be used as the basis in fixing rates.

That for the present the policy of charging a per cent of the rates on through business, subject to certain minima, be continued.

That the steamship line between New York and Colon be retained.

That the contracts with the Pacific Mail Steamship Company and the South American lines be canceled, and the ports of Colon and Panama opened to the use of all steamship lines on equal terms.

That if within a reasonable time a regular passenger and freight steamship service is not established between Colon and the Gulf ports, a line be established by the Panama Railroad.

That if the Pacific Mail Steamship Company withdraws its present Panama line, an effort be made to induce some other company to establish a first-class service between the important Pacific coast ports of the United States and Panama; and in the event that no other company is prepared to furnish the service, that it be provided by the Panama Railroad.

That in traffic connections American steamship lines be favored so far as can be done consistently with the treaty obligations of the United States.

JOSEPH L. BRISTOW,
Special Panama Railroad Commissioner.

To the SECRETARY OF WAR.

needed to promote its successful handling.

EXHIBITS.

Exh

A.

B.

B 1

C.

D 1

D 14

D 2

D 22

E.

F 1.

F 2.

F 3.

F 4.

F 5.

G.

H.

I.

J 1.

J 2.

J 3.

J 4.

J 5.

J 6.

J 7.

INDEX.

Exhibit No.		Page.
A.	Letter of instructions from the Secretary of War.....	52
B.	List of questions submitted to Mr. E. A. Drake, vice-president Panama Railroad Company.....	54
B 1 to 49.	Answers of Mr. Drake to questions.....	55
C.	List of questions submitted to Hon. John F. Wallace, chief engineer Isthmian Canal Commission, and answers thereto.....	168
D 1 to 13.	List of questions sent to American consuls and consular agents on west coast of South America, and answers thereto.....	183
D 14 to 20.	List of questions sent to American consuls and consular agents on west coast of Central America and Mexico, and answers thereto.....	198
D 21.	List of questions sent to American consul at Mazatlan, Mexico, and answers thereto.....	205
D 22.	List of questions sent to American consular agent at Guaymas, Mexico, and answers thereto.....	208
E.	Contracts between the Republic of New Granada and the Panama Railroad Company, made in 1850 and 1867 and modified in 1876, 1880, and 1891.....	209
F 1.	List of dividends on capital stock of the Panama Railroad Company....	237
F 2.	Copy of agreement between the Panama Railroad Company and La Compania Sud-Americana de Vapores, dated September 10, 1902....	238
F 3.	Copy of amendatory agreement between the Panama Railroad Company and La Compania Sud-Americana de Vapores, dated January 17, 1903	242
F 4.	Copy of agreement between the Panama Railroad Company and the Pacific Steam Navigation Company, dated December, 1904.....	243
F 5.	Memoranda of conversation had with Mr. E. A. Drake, secretary and treasurer, and Mr. R. L. Walker, traffic manager, of the Panama Railroad Company.....	244
G.	List of questions submitted to Mr. H. G. Prescott, acting superintendent of the Panama Railroad, and answers thereto.....	245
H.	Complaint of representatives of Central and South American countries..	248
I.	Statement of Mr. P. H. Cahill, agent of the Panama Railroad Company in Mexico, Central and South America.....	251
J 1.	Copy of list of questions submitted to the Chamber of Commerce of San Diego, Cal., and answers thereto.....	265
J 2.	Copy of list of questions submitted to the Chamber of Commerce of San Francisco, Cal., and "Report of special committee of the board of trustees of the Chamber of Commerce of San Francisco upon utility of Panama route for freight transportation between San Francisco and the Atlantic States, approved at a special meeting of the board of trustees April 20, 1905," made in response to questions.....	270
J 3.	Copy of list of questions submitted to the Chamber of Commerce of Los Angeles, Cal., and answers thereto.....	278
J 4.	Copy of list of questions submitted to the Chamber of Commerce of Portland, Oreg., and answers thereto.....	281
J 5.	Copy of list of questions submitted to the Chamber of Commerce of Tacoma, Wash., and answers thereto; and letter of Mr. William Jones, president of the chamber of commerce.....	285
J 6.	Copy of list of questions submitted to the Board of Trade of New Orleans, La., and answers thereto; and letter of Fred Muller, secretary of the board of trade.....	294
J 7.	Copy of list of questions submitted to the Chamber of Commerce of Mobile, Ala., and answers thereto.....	304

I
N
D
E
X

Exhibit No.		Page.
J 8.	Copy of list of questions submitted to the Chamber of Commerce of Pensacola, Fla.; letter of Mr. W. C. Jones, secretary, with inclosures from Mr. E. O. Saltmarsh, superintendent, and Mr. U. B. Compton, traffic manager of the Louisville and Nashville Railroad Company.....	308
J 9.	Copy of list of questions submitted to the Chamber of Commerce of Galveston, Tex., and letters of Mr. C. R. Kitchell, secretary, in response thereto.....	312
J 10.	Copy of list of questions submitted to the Chamber of Commerce of Seattle, Wash. No response.....	318
K.	Reference of letter of Maj. Gen. George W. Davis, governor of the Isthmian Canal Zone, inclosing extract from report of the select committee on Panama Canal, Pacific Mail Steamship Company, and Panama Railroad Company, March 3, 1893, and copy of said Congressional report.....	320
L.	Copy of letter to Mr. R. P. Schwerin, vice-president and general manager of the Pacific Mail Steamship Company and his reply, with inclosures.....	329
L 1.	Letter of Mr. R. P. Schwerin, inclosing one from Mr. F. Pearne, agent of the Pacific Mail Steamship Company at Panama.....	350
L 2.	Copies of letters from S. Sandberg, captain of the Pacific Mail steamship <i>City of Panama</i> , and George W. Brown, captain of the Pacific Mail steamship <i>City of Para</i>	352
M 1.	Copy of convention between the United States and the Republic of Panama for the construction of a ship canal to connect the waters of the Atlantic and Pacific oceans.....	355
M 2.	Copy of treaty between the United States and Great Britain to facilitate the construction of a ship canal.....	361
N 1 to 32.	Miscellaneous exhibits.....	363
O 1 to 22.	Exhibits of miscellaneous freight tariffs.....	394

EXHIBIT A.

LETTER OF INSTRUCTIONS FROM THE SECRETARY OF WAR.

WAR DEPARTMENT,
Washington, January 19, 1906.

SIR: By even date herewith the President has commissioned you to act as a special commissioner for the purpose of investigating and reporting upon certain questions, the answers to which deeply affect the policy properly to be pursued in the management by the Government of the Panama Railroad and the ships now operated by the Panama Railroad between New York and Colon in connection with the railroad.

For a number of years the Panama Railroad has been used as a link for through business between New York and San Francisco, under an arrangement between the Panama Railroad Company operating its railroad and a line of steamers from Colon to New York, and the Pacific Mail Steamship Company, operating a line of steamers from San Francisco and way stations to Panama, which excluded from this traffic all possible competition on either side of the Isthmus. The contract with the Pacific Mail Steamship Company expressly provided that the Panama Railroad Company would not issue or accept through bills of lading from New York to San Francisco except by the Pacific Mail line, and as no other bills of lading would be issued at the New York office of the Panama Railroad to San Francisco except via the Panama Railroad and Pacific Mail Steamship Line, there was no opportunity for rival lines either in the Atlantic or the Pacific. There are several lines which run south from Panama to the ports on the west coast of South America, and there are a number of lines which run from Colon eastward and northward to Great Britain, Germany, and France. It is of great importance for those responsible for the future management of the Panama Railroad Company to know the conditions under which the trade between San Francisco and Panama can be or must be conducted, and whether, if the relations between the Pacific Mail and the Panama Railroad Company is required to be the same as that between any other steamship company and the Panama Railroad Company, the continuance of an American line between San Francisco and Panama is made impossible. The President is in receipt of a number of letters and telegrams from merchants on the west coast complaining of the exclusive contract under which the railroad company is cooperating with the Pacific Mail. Upon the Atlantic side of the Isthmus it is understood that the wharfing facilities are so small and are

REPORT OF JOSEPH L. BRISTOW.

53

so completely in the possession of the Panama Railroad Company that no vessel can obtain a foothold in the trade between New York and Panama except by the permission of the commission. The Government has expended \$7,000,000 in the purchase of the Panama Railroad Company and the steamship line between New York and Colon, or, rather, it has spent that amount for sixty-nine-seventieths of the stock of the Panama Railroad Company, which owns and operates the railroad in Panama and the steamship line above referred to. It is, of course, important if no other greater public purpose appears, that the road should be made to render as much profit as possible, consistent with its use as an instrumentality for the construction of the canal. On the other hand, the Government has no desire to make profit out of the operation of the railroad, if profitable rates are unreasonable or if Panama or Colon are thereby excluded from the natural benefit that ought to be theirs from lying at the termini of so important a link of commerce. The Government is anxious to secure and maintain reasonable rates for the transfer of its own freight from the United States to the Isthmus, and if it can do so is willing to lease the line of steamers now owned by it to some other person who will agree to maintain the business and furnish a good weekly service and carry at reasonable rates for the public and at preferentially low rates for the Government. It is possible that such an arrangement can not be obtained with any responsible line. Then, if that be so, it furnishes a good and sufficient reason for the continuance of the present line under Government management and auspices. I have given in some detail the considerations that must affect the decision of the Government as to the use of the Panama Railroad, with a view to instructing you as to your duties under the commission which the President has asked you to discharge.

You will visit San Francisco, Portland, and Seattle, with a view of learning there the conditions of the trade between those ports and Panama. You will also visit the large cities on the west coast of Mexico and Central America, where the Pacific Mail steamers stop, and at those ports you will investigate the conditions prevailing in the trade which feeds the Pacific Mail line of steamers. At Panama you will inquire into the lines which run south of Panama, the business which they do, the terms upon which they do the business now with the Panama Railroad Company, the terms under which they would continue the business if the Panama Railroad Company were run for the benefit of all steamship lines, with discrimination in favor of none. You will consider how low rates ought to be charged on the railroad and the steamship line from New York to make Panama a port of distribution and to work substantial benefit to the Republic through which the road runs. You will make similar examination in the town of Colon. You will visit New Orleans, Pensacola, and New York, on the Atlantic side, with a view of learning the possibilities of trade between those cities and Panama, and the possibilities of the establishment of steamship lines furnishing reasonable rates from those cities to the town of Colon. You may look into the management of the present Panama Railroad, and to this end you will be given authority, when you request it, for the examination of the books of the railroad company on the Isthmus or in the city of New York.

You will make your conclusions in as short a time as you deem consistent with a thorough investigation, certainly before the expiration of the six months when this Government will have to determine what its relations with the Pacific Mail Steamship Company shall be. It is said that there is some fixed relations between the rates for through travel from San Francisco to New York across the Isthmus, and the rates of the transportation lines between the Atlantic and the Pacific oceans. You will investigate what the connection is, if any, and whether it exists to-day under the present management of the railroad.

You will report to me from time to time—at least once a month—what you have done, and send a general statement of the information which up to the time of the report you have gathered.

Before going to the west coast you will visit New York with a letter of introduction from me to Mr. Drake, the vice-president of the Panama Railroad, who will submit to you the books of the company, its tariff rates, past and present, and its contracts with the various companies with which it has done business, and such other information as the archives of the company will show upon the general subject-matter of your investigation.

With the stenographer, who under the order of the President is given you, you will take the evidence as fully as in your discretion you deem wise, and thus make a record of your investigations upon which, when the investigations are at an end, you will report your conclusions and your recommendations as to the course to be taken with the property of the Panama Railroad Company and its management.

It is possible that in the course of your investigations you will need an interpreter or other assistance, and the cost thereof will be charged in your general expense account, to be approved by me.

You may begin your work either on the Pacific or the Atlantic coast, in your discretion, after your investigation of the books and business of the Panama Railroad Company at New York City shall have been finished.

Your official designation will be the "Special Panama Railroad Commissioner."

All your expenses, stationery, subsistence, travel, will be allowed to you upon vouchers properly certified.

My impression is that you are authorized, in view of the fact that the President, by Executive order, submitted your action and that of the Isthmian Canal Commission to the supervision of the Secretary of War, to use the frank or penalty envelopes of the War Department in the sending of letters on official business.

I need hardly say to you that the information which you are to acquire and your reports to me must be kept strictly confidential; otherwise the purpose of your commission may be seriously interfered with.

Very respectfully,

(Signed)

WM. H. TAFT,
Secretary of War.

Hon. JOSEPH L. BRISTOW,
Special Panama Railroad Commissioner, Washington, D. C.

EXHIBIT B.

LIST OF QUESTIONS SUBMITTED TO MR. E. A. DRAKE, VICE-PRESIDENT PANAMA RAILROAD COMPANY.

Name all officers and employees on the pay rolls of the New York office; present salary of each; when first employed; and each increase or decrease in salary since first employed. In case of officers, give salary fixed for the office since it was first created, or for twenty years, if records do not conveniently show for prior time.

Total expense of the New York office in detail for ten years; detailed expense for maintaining each department.

Names of all general officers on the Isthmus; present salaries; when first employed, and each increase or decrease in salary since first employed. Give salary fixed for each officer since the office was first created, or for ten years, if the records do not conveniently show for prior time.

Amount of money expended for labor on the Isthmus in detail as to the kind of labor.

Statement as to the number, size, and character of the ships owned by the company, where employed, their condition, how long in use, the original cost, amount expended on each for repairs. Give expenses—monthly and per annum—for maintaining and operating each ship; and earnings of each—per month and per annum—for the last five years.

How many vessels are chartered; how long have they been chartered; rate at which chartered; size and character of each; when built; original cost of each ship; value at time of chartering; cost of maintaining and operating, per month and per annum; earnings of each, per month and per annum.

Number of agencies; where located; expense of maintaining; how are agents paid—by commission, fee, or salary; amount and nature of business secured by each.

Give detailed statement of the equipment of the railroad and its condition. Is the equipment sufficient to handle the business, or should additional equipment be provided?

What effect would it have on the revenues of the railroad company to discontinue the steamship line.

What is the basis upon which the division of freight charges from New York to Panama is made between the railroad and steamship line?

Why did you reduce the local railroad tariffs, and what benefit do you expect to accrue from such reduction? State, also, as to telegraph tolls.

Does the reduced local tariff make the charges for local freight across the Isthmus less than that charged for through freight? If so, would a reduction of charges for through freight from Europe and New York result in increased business?

What per cent of the receipts for telegraph tolls are local and what per cent foreign?

Have the through cable rates to points beyond Panama been reduced as a result of the reduction of telegraph tolls across the Isthmus?

With how many European lines has the Panama Railroad Company traffic arrangements?

State in general the terms of the contracts or agreements with these lines.

What are the terms of the traffic arrangements with the South American lines?

What are the traffic arrangements with the Pacific Mail Steamship Company?

Why do you not have traffic arrangements with other lines from Panama?

Under the traffic contract with the Pacific Mail Steamship Company, who fixes the special rates to be charged from New York to San Francisco and from San Francisco to New York?

Give a brief comparison of rates charged for steamship transportation by the Panama Railroad Company, United Fruit Company, Ward Line, and other Atlantic companies where distances and conditions are similar.

If possible give in general terms a comparison of the rates charged by the Pacific Mail Steamship Company and other steamship companies operated on the Pacific coasts of North and South America where distances and conditions are similar.

Schedule of rates of United Fruit Company's vessels from the United States to Central and South American ports.

A statement as to the number of steamship lines operating on the Pacific coast with which traffic arrangements from Panama might be made.

Has there been any negotiations looking to traffic arrangements with these companies?

List of steamship companies that operate vessels from ports of the United States to South American ports.

What is the minimum rate fixed for business from Europe to Panama and to north and south Pacific ports, and what is the basis of fixing the minimum rate?

What is the minimum rate from New York to Panama and to north and south Pacific ports, and what is the basis on which such minimum rate is fixed?

Why is the charge on the railroad for through passengers so much more than the charge for local passengers?

Why is the through rate per ton, as shown by letter to Mr. Burr, for freight from Europe to Panama greater than rate to Pacific ports, both north and south?

Why is the rate from New York and Europe to Buenaventura, etc., greater than to Guayaquil and other points south?

What are the principal articles of freight transported from New York to the Pacific ports of the United States?

What are the principal articles of freight transported from New York to the Mexican, Central, and South American ports on the Pacific coast?

What are the principal articles of freight transported from Europe to the Pacific ports of the United States?

What are the principal articles of freight transported from Europe to the Pacific ports of Mexico and Central and South America?

What are the principal articles of freight transported from the Pacific ports of the United States to New York and to Europe?

What are the principal articles of freight transported from the Pacific ports of Mexico and Central and South America to New York and to Europe?

Give a statement of revenues and expenditures per annum for the last ten years, and any explanatory notes necessary to a clear understanding.

At the time the \$4,000,000 4½ per cent bonds were issued, what was the indebtedness of the company?

Give date of sale and number of sales of 4½ per cent bonds, the amount realized, and state what was done with the proceeds of such sales.

Copy of statement as to fixed charges, interest, bonds, etc., submitted the first day.

Tariffs of Ward Line from New York to Cuban and South American ports.

What permanent improvements or additions to the property have been made out of the earnings during the last ten years?

State what such improvements or additions are, and cost of each.

By additional improvements or additions I do not mean those necessary for the maintenance of the property; mention only such as could be capitalized.

Date of sailing of vessels from New York and from Panama.

In answering the questions, please make every answer independent, so that they can be arranged, if desired, in an order different from the way they appear on the paper as submitted.

NEW YORK, January 28, 1905.

EXHIBITS B, 1 TO 49.

ANSWERS OF MR. DRAKE TO QUESTIONS.

EXHIBIT B, 1.

PANAMA RAILROAD COMPANY.

Salary list, January 23, 1905—General offices.

Executive officers:	Per annum.
President.....	\$10,000
Vice-president and secretary.....	8,500
General manager.....	7,000
Secretary's office:	
Assistant secretary.....	2,400
Stenographer and typewriter.....	1,000
Stenographer and typewriter.....	1,000

Secretary's office—Continued.		Per annum.
Porter and messenger.....		\$600
Office boy.....		312
Telephone boy.....		216
Accounting department:		
Treasurer.....		5,200
Freight cashier.....		1,200
Teller and bank messenger.....		900
Auditor.....		3,300
General clerk.....		1,800
Bookkeeper.....		1,620
General clerk and typewriter.....		1,000
Clerk.....		1,000
Manifest clerk.....		1,020
Voucher record clerk.....		840
Manifest clerk.....		840
Manifest clerk.....		540
Clerk and messenger.....		240
Traffic department:		
Traffic manager.....		6,000
Chief clerk.....		1,920
Freight solicitor.....		1,800
Ticket agent.....		1,500
Manifest clerk.....		1,560
Claim agent.....		1,500
Way-bill clerk.....		1,200
Assistant freight solicitor and clerk.....		1,080
Clerk.....		900
Stenographer and typewriter.....		900
Assistant manifest clerk.....		840
Messenger.....		720
Manifest typewriter.....		720
Billing clerk.....		720
Clerk.....		720
Assistant manifest typewriter.....		540
Junior clerk.....		312
Inspecting engineer.....		2,400
Clerk and typewriter.....		816
Purchasing agent.....		1,500
Clerk.....		150
Legal department: Sullivan & Cromwell, general counsel, annual retainer.....		6,000

Salary list, January 23, 1905—Pier and steamers.

Pier No. 67, North River, New York:	
Terminal superintendent.....	3,300
Clerk.....	1,050
Office boy.....	360
Receiving clerk.....	1,200
Assistant receiving clerk.....	900
Delivery clerk.....	1,200
Baggage master, etc.....	960
Carpenter.....	1,080
Cooper.....	1,080
Head watchman (\$3 per day).....	1,080
Tally clerk.....	780
Tallyman.....	720
Gateman.....	720
Steamers:	
	Per month.
Captains.....	\$200
Mates.....	75
Second mates.....	50
Third mates.....	40
Chief engineers.....	150
First assistant engineers.....	90
Second assistant engineers.....	80
Third assistant engineers.....	70

Steamers—Continued.

	Per month.
Pursers.....	\$90
Freight clerks.....	75
Stewards.....	50
Surgeons.....	75
	65
	50

NOTE.—Each of the above receive \$1 per day board while in port, New York.

EXHIBIT B 2.

Salaries of present officers.

	Per annum.
J. Edward Simmons, president.....	\$10,000
Edward A. Drake, vice-president and secretary.....	8,500
Sylvester Deming, treasurer.....	5,200
Thomas H. Rossbottom, assistant secretary.....	2,400

EXHIBIT B 3.

	Per annum.
President:	
April, 1883, to April, 1888. J. G. McCullough.....	\$10,000
April, 1888, to May, 1895. John Newton.....	10,000
May, 1895. J. Edward Simmons.....	10,000
Vice-president:	
April, 1888, to March, 1893. Charles Coudert.....	6,000
April, 1893, to May, 1895. J. Edward Simmons.....	1,000
July, 1895, to September, 1899. George Whaley.....	1,000
October, 1904. E. A. Drake, and secretary.....	8,500
First vice-president:	
April, 1899, to December 15, 1904. George Whaley.....	5,500
Second vice-president and secretary:	
April, 1899, to October, 1904. E. A. Drake.....	8,500
Secretary:	
April, 1894, to April, 1896. E. A. Drake.....	6,000
April, 1897, to April, 1899. E. A. Drake.....	7,000
Treasurer:	
April, 1894, to November, 1895. E. L. Oppenheim, resigned.....	6,000
December 1, 1895. Sylvester Deming.....	4,500
January, 1897. Sylvester Deming.....	4,700
April 1, 1900. Sylvester Deming.....	5,200
Secretary and treasurer:	
April, 1883. E. Z. Penfield.....	4,000
April, 1888. E. Z. Penfield.....	6,000
October, 1888. Resigned.....	
October, 1888, to April, 1894. E. L. Oppenheim.....	6,000
November, 1888, to December, 1888. E. A. Drake, pro tem.....	6,000
January, 1890, to February, 1890. E. A. Drake, pro tem.....	6,000
December, 1890, to April, 1891. E. A. Drake, pro tem.....	6,000
March, 1892, to June, 1892. E. A. Drake, pro tem.....	6,000
Assistant secretary and treasurer:	
March, 1887, to April, 1888. Sylvester Deming.....	2,400
July, 1893. E. A. Drake.....	2,500
Assistant secretary:	
July, 1893, to April, 1894. E. A. Drake.....	2,500
April, 1902. T. H. Rossbottom.....	1,800
April, 1904. T. H. Rossbottom.....	2,400
General manager:	
July, 1893, to April, 1899. George Whaley.....	9,000
May, 1899. Charles Paine.....	7,000

EXHIBIT B 4.

Treasurer's office.

	Per month.
Sylvester Deming, treasurer.....	^a \$5,200.00
1875, January 5. Entered service of company as superintendent's clerk, Colon.....	100.00
1875, July. Train dispatcher and telegraph operator.....	140.00
1876, October. Auditor, Colon.....	140.00
1878, November. Chief clerk and cashier, Panama.....	150.00
1880, August to October, 1883. Cashier, Colon.....	200.00 to 250.00
1883, October. Left the service and employed by Pacific Mail Steamship Company.	
1887, March 1. Reentered service as assistant secretary and treasurer, New York.....	200.00
1888, April 1. Chief clerk, New York.....	200.00
1888, October. Chief clerk, New York.....	250.00
1890, January. Chief clerk, New York.....	300.00
1895, December 1. Treasurer.....	^a 4,500.00
1897, January 1. Salary increased to.....	^a 4,700.00
1900, April 1. Salary increased to.....	^a 5,200.00
F. N. Drake, freight cashier steamship line.....	100.00
1894, July 1. Entered company's service as stenographer and clerk, pier office.....	^b 7.00
1894, October. Salary increased to.....	^b 10.00
1895, January. Transferred to steamship department of general office as clerk and stenographer at.....	^b 12.50
1895, March. Appointed freight solicitor steamship line at.....	75.00
1897, April 15. Left the service.	
1899, May. Reentered service as temporary clerk, pier office, at.....	75.00
1899, July 1. Teller, pier office, at.....	75.00
1900, May 1. Appointed freight cashier at same salary and transferred with pier office force to traffic office.	
1901, January. Salary increased to.....	100.00
Irving Fulton Orr, teller, bank messenger, and typewritist.....	75.00
1901, December 30. Entered company's service as teller and bank messenger at.....	50.00
1902, July 1. Salary increased to.....	60.00
1903, July 1. Salary increased to.....	66.66
1904, July 1. Salary increased to.....	75.00

Accounting department.

John Adams, auditor.....	275.00
1886, April 1. Entered service of company as clerk.....	75.00
1887, January 1. Manifest clerk.....	90.00
1888, May 1. Bookkeeper.....	90.00
1888, June 1. Bookkeeper.....	100.00
1889, January 1. General clerk.....	125.00
1891, September 1. General clerk.....	150.00
1893, July 15. General clerk.....	175.00
1895, December 1. Chief clerk.....	200.00
1896, March 15. Auditor.....	200.00
1897, January 1. Salary increased to.....	208.33
1898, March 1. Salary increased to.....	225.00
1901, April 1. Salary increased to.....	250.00
1904, October 1. Salary increased to.....	275.00
V. M. Newton, general clerk.....	150.00
1891, September. Entered service of company as manifest clerk.....	60.00
1892, February. Manifest clerk.....	75.00
1893, July. Manifest clerk.....	87.50
1896, January. General clerk.....	100.00
1897, January. General clerk.....	112.50
1898, March. General clerk.....	125.00
1899, January 5. Resigned.	

^a Per annum.^b Per week.

V. M. Newton, general clerk—Continued.

1890, July 1. Reentered company's service in former capacity of general clerk.....	Per month. \$125.00
1903, March 1. Salary increased to.....	150.00
Philip Hague, bookkeeper.....	135.00
1887, August 1. Entered service of company as clerk.....	50.00
1888, April 1. Manifest clerk.....	50.00
1888, June 1. Manifest clerk.....	75.00
1889, January 1. Manifest clerk.....	90.00
1891, May 1. Manifest clerk.....	100.00
1891, September 1. Bookkeeper.....	100.00
1892, January 1. Bookkeeper.....	112.50
1893, July 1. Bookkeeper.....	125.00
1903, April 1. Bookkeeper.....	135.00
Paul Kuehner, general clerk.....	83.33
1894, June 4. Entered service of company as office boy.....	10.00
1894, July. Office boy.....	12.00
1895, April. Office boy.....	16.00
1895, September 1. Office boy.....	20.00
1896, March 1. Office boy.....	30.00
1897, January 1. Office boy and messenger.....	33.34
1898, March 16. Clerk and messenger.....	40.00
1899, January 15. Auditor's office clerk.....	45.00
1900, January 1. Auditor's office clerk.....	55.00
1901, January 1. Auditor's office clerk.....	60.00
1901, September 15. General clerk, auditor's office.....	75.00
1903, January 1. Salary increased to.....	83.33
P. G. Hoyt, clerk.....	83.33
1896, August 10. Freight clerk, <i>Alliance</i>	50.00
1897, May 14. Clerk, auditor's office.....	60.00
1899, January 15. Clerk, auditor's office.....	66.66
1900, January 1. Clerk, auditor's office.....	70.00
1901, January 1. Clerk, auditor's office.....	75.00
1901, September 15. Clerk, auditor's office.....	83.33
F. L. Field, manifest clerk.....	85.00
1885, May. Entered service of company as check clerk, freight department, Colon.....	125.00
1886-1890. Freight agent's clerk, Colon.....	175.00
Left Isthmus account abolishment of position because cessation canal work.	
1894, September, to June, 1895. Tally clerk and watchman, pier No. 34, North River.....	a 2.00
1895, June. Manifest clerk, general office.....	60.00
1897, January. Manifest clerk, general office.....	66.66
1899, January. Manifest clerk, general office.....	75.00
1901, January. Manifest clerk, general office.....	80.00
1903, April 1. Manifest clerk, general office.....	85.00
E. J. Thiry, clerk.....	70.00
1898, April 11. Entered service of company as office boy and messenger.....	25.00
1899, January 15. Clerk, auditor's office.....	30.00
1900, January 1. Clerk, auditor's office.....	40.00
1901, January 1. Clerk, auditor's office.....	50.00
1901, September 15. Clerk, auditor's office.....	60.00
1903, January 1. Salary increased to.....	70.00
S. L. Birdsall, clerk.....	70.00
1886, February 18. Entered service of company as messenger.....	20.00
1887, January. Messenger and abstract clerk.....	30.00
1888, June. Messenger and invoice clerk.....	40.00
1889, January. Invoice and manifest clerk.....	50.00
1891, January. Invoice and manifest clerk.....	55.00
1891, March. Manifest clerk.....	60.00
1892, January. Manifest clerk.....	75.00
1893, July. Manifest clerk.....	87.50
1899, January. General clerk.....	87.50
1901, August 15. Left the service.	
1903, March 1. Reentered service as clerk at.....	60.00
1905, January 1. Salary increased to.....	70.00

a Per day.

REPORT OF JOSEPH L. BRISTOW.

	Per month.
Jos. Cuneen, clerk.....	\$45.00
1899, January 13. Entered service of company as office boy.....	^a 4.00
1900, August 1. Salary increased to.....	22.00
1901, January 1. Salary increased to.....	26.00
1901, May 9. Clerk and messenger, auditor's office.....	30.00
1901, October 1. Clerk, auditor's office.....	40.00
1903, January 1. Salary increased to.....	45.00
John J. Mathews, clerk and messenger.....	20.00
1904, August 1. Entered service of company as above.....	

Assistant secretary's office.

T. H. Rossbottom, assistant secretary.....	^b 2,400.00
1887, August 7. Entered service of company as office boy, general office.....	^b 2.50
1888, January. Office boy.....	^b 3.00
1889, January. Office boy and messenger.....	^b 5.00
1889, July. Messenger and typewriter.....	28.00
1890, January. Stenographer and typewriter.....	28.00
1891, January. Stenographer and typewriter.....	40.00
1892, July. Invoice and manifest clerk, accounting department.....	50.00
1893, January. Stenographer and typewriter.....	50.00
1894, January. Stenographer and typewriter.....	60.00
1895, October. Stenographer and typewriter.....	75.00
1897, January. Stenographer and typewriter.....	87.50
1897, December 1. Assistant to secretary.....	100.00
1899, September 1. Assistant to secretary.....	115.00
1902, April 7. Elected assistant secretary by board of directors.....	^b 1,800.00
1904, April 4. Salary increased by board of directors to.....	^b 2,400.00
Paul H. Deming, stenographer and typewriter.....	83.33
1902, July. Entered service of company as stenographer and typewriter.....	50.00
1903, March 15. Salary increased to.....	60.00
1903, December 15. Salary increased to.....	70.00
1904, June 1. Salary increased to.....	75.00
1904, December 15. Salary increased to.....	83.33
Ralph W. Ensign, stenographer and typewriter.....	83.33
1900, June 5. Entered service of company.....	52.00
1901, May 9. Stenographer, traffic department.....	65.00
1902, May 19. Stenographer, secretary's department.....	75.00
1902, July 15. Stenographer, traffic department.....	65.00
1903, November 15. Salary increased to.....	75.00
1904, December 15. Salary increased to.....	83.33
Transferred to assistant secretary's office.....	
Daniel W. Brown, porter, messenger, and office boy.....	50.00
1893, June. Entered service of company as porter at pier office, steamship line, account transfer of Pacific Mail Steamship Company's pier office force to Panama Railroad.....	60.00
1898, May 15. Salary reduced, account decreased traffic caused by war with Spain.....	45.00
1900, May 1. Transferred with pier-office force to general office, No. 24 State street.....	
1903, April 1. Salary increased to.....	50.00
Alexander Sohmer, office boy.....	26.00
1904, June 3. Entered service of company as messenger and clerk in auditor's office.....	20.00
1904, August 1. Transferred to assistant secretary's office as telephone switchboard operator and messenger.....	20.00
1904, December 15. Office boy.....	26.00
Stephen Wilson, telephone operator and office boy.....	18.00
1904, entered service of company December 16.....	

Inspecting engineer's office.

Roland Allwork, inspecting engineer.....	200.00
1897, May 19. Entered service of company as clerk to chief engineer.....	90.00
1898, January 1. Salary increased to.....	112.00

^a Per week.^b Per annum.

REPORT OF JOSEPH L. BRISTOW.

61

Roland Allwork, inspecting engineer—Continued.

	Per month.
1899, August 1. Inspecting engineer.....	\$125.00
1900, September 1. Salary increased to.....	150.00
1905, January 1. Salary increased to.....	200.00
Arthur N. Hargrave, clerk and typewritist.....	75.00
1903, January 12. Office boy and junior clerk, auditor's office.....	25.00
1903, December 1. Appointed timekeeper at Cramps' shipyard, Philadelphia, while <i>Advance</i> and <i>Finance</i> were being repaired.....	60.00
1903, July. After conclusion of repairs continued in office of inspecting engineer as clerk and typewritist.....	
1904, June 1. Salary increased to.....	48.00
1905, January 1. Salary increased to.....	75.00

Purchasing agent's office.

Alfred Anderson, purchasing agent.....	125.00
1897, December 7. Entered company's service as stenographer and typewriter.....	83.33
1899, September 1. Salary increased to.....	95.00
1901, January 1. Salary increased to.....	100.00
1901, May. Appointed purchasing agent vice Bloomfield.....	100.00
1903, June 1. Salary increased to.....	125.00
1904, May 1. Allowed \$50 per month by Isthmian Canal Commission account their availing of his services as purchasing agent.....	
1904, November 15. Appointed shipping agent of Isthmian Canal Commission at \$50 per month; this is additional to \$125, salary paid him by Panama Railroad Company as purchasing agent.....	
H. J. Bell, clerk.....	112.50
1895, January 21. Stenographer and typewriter, pier office.....	30.00
1896, January. Salary increased to.....	45.00
1897, January 26. Left the service.....	
1904, May 23. Stenographer and clerk, purchasing agent's office (paid by Isthmian Canal Commission on account of his employment for their work).....	75.00
1904, November 16. Salary increased (\$100 of which is paid by Isthmian Canal Commission).....	112.50

Traffic manager's office.

R. L. Walker, traffic manager.....	^a 6,000.00
1897, December 1. Entered service of company as traffic manager.....	^a 5,000.00
1900, May 1. Salary increased to.....	^a 6,000.00
G. F. Fink, chief clerk (steamship department).....	160.00
1893, June. Entered service of company as chief clerk, pier office.....	
1900, May 1. Transferred to traffic department, down town, account pier office being abolished.....	
A. E. Paterson, freight contracting agent (steamship department).....	150.00
1893, January. Entered service of company as freight solicitor.....	150.00
1894, January. Salary reduced to.....	135.00
1901, January 1. Salary restored to.....	150.00
C. C. Van Riper, ticket agent (steamship department).....	125.00
1893, June. Entered service of company as ticket agent.....	125.00

Traffic manager's office (steamship department).

W. B. Hait, clerk.....	130.00
1893, June 15. Entered service of company as clerk.....	104.16
1894, June 15. Salary increased to.....	120.00
1903, January 1. Salary increased to.....	130.00
J. H. Miller, claim agent.....	125.00
1893, November. Entered service of company as clerk.....	60.00
1896, February. Resigned.....	
1897. Reentered service of company as freight claim clerk.....	90.00
1898, March 15. Salary increased to.....	105.16
1901, February 1. Salary increased to.....	115.00
1903, April 15. Title changed to claim agent by second vice-president and traffic manager.....	
1903, October 1. Salary increased to.....	125.00

^a Per annum.

	Per month.
Thomas Magrath, clerk.....	\$100.00
1893, June. Entered service of company.....	112.50
1894, June. Resigned.....	
1896, January. Entered service of company.....	75.00
1897, April 22. Teller.....	75.00
1899, June 15. Salary increased to.....	90.00
1900, May 1. Transferred to traffic department, account abolishment pier office.....	
1901, October 15. Increased to.....	100.00
R. E. Rutherford, clerk.....	90.00
1899, July 1. Entered service of company.....	40.00
1899, November 1. Freight clerk <i>Advance</i>	50.00
1899, December 1. Resumed duties as clerk at pier office.....	
1900, August 1. Salary increased to.....	50.00
1900, May 1. Transferred to traffic department, down town, account abolishment pier office.....	
1900, January 1. Salary increased, account writing manifests on typewriter.....	60.00
1903, January 1. General clerk and assistant consignment agent.....	70.00
1903, November 15. Salary increased to.....	80.00
1904, December 15. Salary increased to.....	90.00
M. J. M. Montforte, clerk.....	75.00
1894, June 15. Entered service of company.....	70.00
1897, January 1. Salary increased to.....	75.00
1899, June 15. Salary increased to.....	80.00
1899, July 1. Salary placed at \$75, plus \$3 per steamer for preparing Spanish consular papers.....	
1900, May 1. Transferred to traffic department, down town, account abolishment pier office.....	
Joseph Slyman, stenographer and typewriter.....	75.00
1897, June 7. Entered service of company as office boy.....	a 4.00
1898, November 1. Increased to.....	a 5.00
1899, January 15. Promoted office boy and messenger.....	a 5.00
1900, January 1. Clerk and messenger, auditor's office.....	30.00
1901, January 1. Clerk and messenger, auditor's office.....	33.33
1901, May 9. Manifest stenographer, traffic department.....	40.00
1901, October 15. Salary increased to.....	50.00
1902, October 7. Appointed freight clerk <i>Alliance</i> , one trip at \$50, account regular clerk reporting sick with fever.....	
1902, October 29. Resumed duties as manifest stenographer.....	
1903, January 1. Manifest typewriter.....	60.00
1904, December 15. Stenographer, traffic department.....	75.00
R. H. Clarke, clerk.....	70.00
1883 to 1890. Employed on Isthmus in various capacities of check clerk, freight clerk, and teller; salary, when leaving.....	225.00
1896, March. Entered service of company as clerk, freight department.....	a 2.00
1897, April 1. Salary increased to.....	60.00
1899, June 15. Salary increased to.....	80.00
1900, May 1. Transferred to traffic department, down town, account abolishment pier office.....	
1901, October 15. Salary increased to.....	90.00
1903, April 15. Resigned account illness.....	
1903, May 1. Reentered company's service as clerk.....	70.00
J. A. Donovan, manifest typewriter.....	60.00
1902, September 22. Entered service of company as office boy, secretary's office.....	16.00
1903, January 1. Office boy, traffic department.....	26.00
1903, October 1. Manifest typewriter.....	35.00
1904, March 15. Salary increased to.....	45.00
1904, December 15. Salary increased to.....	60.00
Howard Phelps, jr., manifest typewriter.....	45.00
1904, March 16. Entered service of company as office boy, traffic department.....	26.00
1904, December 15. Manifest typewriter.....	45.00

a Per week.

REPORT OF JOSEPH L. BRISTOW.

65

	Per month.
P. Basombrio, Spanish sobordo clerk.....	\$60.00
1904, February 15. Entered service of company as Spanish sobordo clerk.....	35.00
1904, March 15. Salary increased to.....	45.00
1904, December 15. Salary increased to.....	60.00
John C. Cody, office boy.....	16.00
1903, October 19. Entered service of company as office boy.....	16.00
1903, December 1. Salary increased to.....	20.00
1904, March 15. Salary increased to.....	26.00
1904, December 15. Transferred to traffic office.....	26.00
R. L. Walker, clerk and messenger.....	60.00
1901, January 5. Entered service of company as above.....	
W. Donovan, clerk.....	60.00
1902, March 23. Entered service of company as tallyman on pier.....	a 2.00
1903, June 1. Transferred to freight department, down town office.....	60.00
H. M. Goodwin, clerk.....	b 15.00
1905, January 20. Temporary clerk to relieve pressure caused by sickness of regular employees.....	

Terminal superintendent's office. (Steamship department.)

H. I. Bawden, terminal superintendent.....	\$275.00
1893, June. Entered service of company as cashier.....	150.00
1894, June. Salary increased to.....	250.00
1897, April 22. Appointed assistant to general agent in absence of latter.....	
1900, May 1. Terminal superintendent, pier 57, North River.....	250.00
1901, January 1. Salary increased to.....	275.00
H. R. Henderson, receiving clerk.....	100.00
1894, June 15. Entered service of company as freight clerk <i>Alliance</i>	60.00
1894, July 15. Check clerk on dock.....	a 2.00
1895, April 8. Assistant receiving clerk.....	75.00
1902, July 10. Authorized to represent terminal superintendent during latter's absence.....	
1905, January 1. Salary increased to.....	100.00
W. L. G. McGuire, delivery clerk.....	100.00
1899, December 22. Freight clerk <i>Advance</i>	50.00
1901, March 1. Purser <i>Finance</i>	75.00
1902, February 3. Temporarily employed at pier office in traffic department to assist, and then sent to pier to check up records.....	60.00
1902, October 1. Acted as delivery clerk, and later employed permanently in that position.....	90.00
1905, January 1. Salary increased to.....	100.00
H. J. Kelly, clerk.....	87.50
1895, September 16. Entered service of company as tallyman.....	a 2.00
1895, December 16. Transferred to office at.....	60.00
1897, January 1. Salary increased to.....	66.66 $\frac{2}{3}$
1901, February 1. Salary increased to.....	80.00
1905, January 1. Salary increased to.....	87.50
W. H. Roach, assistant receiving clerk.....	75.00
1900, December. Entered service of company as tally clerk at.....	a 2.00
1903, March 1. Appointed assistant receiving clerk at.....	65.00
1905, January 1. Salary increased to.....	75.00
T. G. Harrow, tallyman and check clerk and assistant delivery and parcel clerk.....	65.00
1902, November 12. Entered service of company as above.....	a 2.00
1905, January 1. Salary increased to.....	65.00
A. M. Secor, checker on dock.....	60.00
1899, November. Entered service of company as checker.....	a 2.00
1905, January 1. Salary increased to.....	60.00
Charles Sleight, baggagemaster.....	80.00
1893, June. Entered service of company as baggagemaster.....	c 15.00
1896, April. Baggagemaster and cartage of outward and homeward mail.....	60.00
1899, July 5. Salary increased to.....	68.00
1904, March 3. Salary increased to.....	80.00

a Per day.

b Per week.

c Per steamer.

	Per month.
John Bennerson, office boy.....	\$30.00
1903, May 11. Entered service of company as office boy.....	20.00
1905, January 1. Salary increased to.....	30.00
There are also employees on the pier:	
Theo. Thompson, carpenter.....	90.00
Mike Ahern, cooper.....	90.00
E. Foran, gateman.....	60.00

and from 15 to 25 watchmen, checkers, etc. These men are paid at the rate of \$2 per per day, and only hired when the terminal superintendent has work for them to do. Record sheets for these employees are not kept, as they do not come under the company's regulations to secure record sheets from all employees above the grade of laborer.

EXHIBIT B 5.

Question. Total expense of the New York office in detail for ten years, and detailed expense for maintaining each department.

Memorandum re statement of general expenses, New York.

The attached statement shows expenses in detail, but not for each department in New York, no separate account for maintaining each department having been kept on the books.

Our classification of disbursement accounts, a copy of which is herewith submitted, will show the nature of the expenses charged to each subaccount, not only for general expenses but for all operating expense accounts.

Special reference to or explanation of certain subaccounts are made as follows:

Account 80. Advertising folders and posters:

The decrease from \$1,443.15 in 1901 to \$281.33 in 1902 is principally due to the discontinuance of the distribution or placing of folders in folder cases in ticket offices in New York and European cities and on Atlantic steamers.

Account 82. Clerks, salaries of:

Account 83. Officers, salaries of:

These accounts include the salaries of all officers and clerks in New York excepting those directly employed in connection with the steamship line. They also include the salaries of the European department, established in 1898, and put in charge of the vice-president and general manager.

An office for the European department was opened in Paris in the latter part of 1898 and maintained for three years. Although the office was closed in 1901, and the services of the clerks employed dispensed with, the vice-president still remained in charge of said department and his salary, previously carried against the New York office, was placed against the Paris office.

As salaries comprise by far the largest single expense, statements in details have been prepared for each year, which will give some idea of each department.

Account 84. General offices, repairs and rent of:

Two-thirds of the rent of offices at No. 24 State street, New York, is debited to this account and one-third to agency expenses, steamship line.

Account 87. Legal services and expenses:

The salary of the company's attorney or special agent at Bogota is debited to this account.

REPORT OF JOSEPH L. BRISTOW.

65

Statement showing expenses in detail charged to general expenses, New York, for the years 1896 to 1903, inclusive, and eleven months of 1904.

Account.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	11 months, 1904.
80. Advertising folders and posters:									
New York office.	\$1,058.20	\$1,356.10	\$759.48	\$1,226.56	\$1,421.39	\$1,443.15	\$281.33	\$259.22	\$541.34
Paris office.				17.50	6.48	29.10			
81. Advertising-general:									
New York office.	225.94	586.26	265.96	239.40	280.40	255.05	250.09	335.16	354.70
Paris office.					1.37	1.29			
82. Clerks, salaries of:									
New York office.	12,910.93	18,482.74	22,704.71	20,068.48	19,773.31	20,685.53	18,400.34	18,811.86	18,498.00
Paris office.			175.41	1,833.36	2,224.69	547.91	67.59	217.63	29.77
83. Directors' and committees' fees:									
New York office.	11,830.00	11,200.00	11,350.00	9,872.50	9,945.00	10,187.50	9,755.00	10,327.00	8,950.00
84. General offices, repairs and rent of:									
New York office.	3,825.00	4,283.16	4,500.00	4,560.00	4,852.00	3,377.36	3,444.49	3,600.01	3,301.05
Paris office.				645.76	646.00	664.91			
85. General offices, other expenses:									
New York office.	2,849.19	2,876.92	2,085.04	2,540.86	4,012.28	2,448.65	1,955.38	2,415.00	2,239.28
Paris office.			476.26	508.17	254.90	124.82	12.98	8.31	11.62
86. Incidentals:									
New York office.	2,087.37	3,441.81	6,113.40	1,243.08	2,304.10	834.25	894.19	1,825.75	1,755.49
Paris office.			49.87	234.17	937.71	240.68	75.28		
87. Legal services and expenses:									
New York office.	25,106.67	11,853.80	8,303.94	9,522.25	8,242.44	9,140.82	12,260.53	10,919.48	6,667.90
Paris office.					3.86				
88. Officers, salaries of:									
New York office.	39,943.87	38,410.11	38,131.78	39,365.43	41,841.66	38,704.01	38,155.00	39,635.00	35,816.66
Paris office.					136.65	136.65	4,033.33	5,500.00	3,666.67
89. Stationery and printing:									
New York office.	1,293.90	1,433.30	1,087.69	1,239.63	1,321.50	1,175.31	915.32	1,215.11	1,140.85
Paris office.			34.82	74.42	59.70	5.92	61.89	6.25	
90. Telegrams and cables:									
New York office.	1,457.61	967.35	1,587.57	1,189.68	1,530.98	1,485.06	1,051.70	1,394.41	1,777.76
Paris office.			53.46	241.13	668.55	125.01	249.38	93.90	172.50
91. Revenue stamps.									
New York.			96,974.33	91,068.37	95,375.06	89,765.69	87,403.97	89,432.00	90,973.02
Total, Paris.			889.82	3,354.51	4,823.56	1,876.29	4,400.42	5,825.99	3,890.56
Total.	102,578.08	94,491.64	97,864.15	94,622.88	100,178.62	91,641.96	91,904.39	95,257.09	84,833.58

NEW YORK, January 28, 1905.

Details of account No. 82, salaries of clerks, New York, for the year 1896.

Treasurer's office:		
Clerk and bank messenger.....	\$694. 98	
Christmas gratuity.....	30. 00	
		\$724. 98
Secretary's office:		
Stenographers, etc.....	1, 565. 82	
Christmas gratuity.....	65. 00	
		1, 630. 82
Auditor's office:		
Auditor.....	2, 400. 00	
Clerks.....	5, 694. 00	
Christmas gratuities.....	360. 00	
Extra compensation to auditor renew system of accounting....	200. 00	
Extra compensation of clerks for night work.....	1, 001. 13	
		9, 655. 13
Purchasing agent.....		900. 00
Total.....		12, 910. 93

NEW YORK, February 2, 1905.

Details of account No. 82, salaries of clerks, New York, for the year 1897.

Treasurer's office:		
Teller and messenger.....	\$657. 33	
Bond of messenger.....	18. 58	
		\$675. 91
Secretary's office.....		2, 159. 23
Auditor's office:		
Auditor.....	2, 500. 00	
Clerks.....	6, 600. 97	
Extra compensation in all departments, but principally auditor's office, for night work.....	1, 003. 43	
		10, 104. 40
Traffic manager's office:		
Claim clerk.....		738. 00
Purchasing agent.....	1, 237. 49	
Gratuity to Mr. G. Reynaud, purchasing agent, on leaving company's service.....	225. 00	
		1, 462. 49
Chief engineer's office:		
Chief engineer.....	2, 674. 97	
Clerk.....	667. 74	
		3, 342. 71
Total.....		18, 482. 74

NEW YORK, February 2, 1905.

Details of account No. 82, salaries of clerks, New York, for the year 1898.

Treasurer's office:		
Teller and messenger.....	\$720. 00	
Bond of messenger.....	10. 00	
		\$730. 00
Secretary's office:		
Assistant to secretary.....	1, 200. 00	
Stenographers and clerks.....	2, 466. 68	
Extra compensation on account of night work.....	17. 35	
		3, 684. 03
Auditor's office:		
Auditor.....	2, 666. 66	
Clerks.....	7, 403. 93	
Extra compensation on account of night work.....	381. 14	
		10, 451. 73

REPORT OF JOSEPH L. BRISTOW.

67

Traffic manager's office:	
Claim clerk.....	\$1,221.60
Purchasing agent.....	1,250.00
Chief engineer's office:	
Chief engineer.....	\$2,966.66
Draftsman.....	2,316.68
	<u>5,283.34</u>
Total.....	22,620.70

NEW YORK, February 6, 1905.

Details of account No. 82, salaries of clerks, New York, for the year 1899.

Treasurer's office:	
Teller and messenger.....	\$1,023.84
Bond of messenger.....	6.50
	<u>\$1,030.34</u>
Secretary's office:	
Assistant to secretary.....	1,260.00
Stenographers and clerks.....	1,826.64
	<u>3,086.64</u>
Auditor's office:	
Auditor.....	2,700.00
Clerks.....	6,910.00
Extra compensation in connection with night work.....	174.46
	<u>9,784.46</u>
Traffic manager's office:	
Claim clerk.....	1,250.00
Extra compensation in connection with night work of the above.....	119.54
	<u>1,369.54</u>
Purchasing agents:	
R. P. Floyd Jones.....	430.10
W. Bloomfield.....	633.55
	<u>1,063.65</u>
Chief engineer's office:	
Chief engineer.....	2,000.00
Inspecting engineer.....	459.68
Inspecting engineer; extra compensation in connection with night work.....	12.25
Draftsman.....	1,261.92
	<u>3,733.85</u>
Total.....	20,068.48

NEW YORK, February 6, 1905.

Details of account No. 82, salaries of clerks, New York, for the year 1900.

Treasurer's office:	
Teller and messenger.....	\$720.00
Bond of messenger.....	8.00
	<u>\$728.00</u>
Secretary's office:	
Assistant to secretary.....	1,380.00
Stenographers and clerks.....	1,569.32
	<u>2,949.32</u>
Auditor's office:	
Auditor.....	2,700.00
Clerks.....	8,421.31
Extra compensation in connection with night work.....	19.32
	<u>11,140.63</u>
Traffic manager's office:	
Claim clerk.....	1,250.00
Claim clerk; extra compensation in connection with night work.....	247.68
	<u>1,497.68</u>
Purchasing agent.....	1,200.00

Inspecting engineer's office:		
Inspecting engineer.....	\$1,600.00	
Draftsmen.....	657.68	
		<u>\$2,257.68</u>
Total.....		19,773.31
NEW YORK, February 6, 1905.		

Details of account No. 82, salaries of clerks, New York, for the year 1901.

Treasurer's office:		
Teller and messenger.....	\$853.23	
Bond of messenger.....	6.84	
		<u>\$860.07</u>
Secretary's office:		
Assistant to secretary.....	1,380.00	
Stenographers and clerks.....	1,836.21	
		<u>3,216.21</u>
Auditor's office:		
Auditor.....	2,925.00	
Clerks.....	8,523.93	
Extra compensation in connection with night work.....	12.23	
		<u>11,461.16</u>
Traffic manager's office:		
Claim clerk.....	1,369.17	
Claim clerk; extra compensation in connection with night work.....	20.64	
		<u>1,389.81</u>
Purchasing agents:		
W. Bloomfield.....	425.81	
Alfred Anderson.....	750.00	
		<u>1,175.81</u>
Inspecting engineer's office:		
Inspecting engineer.....	1,800.00	
Inspecting engineer; extra compensation in connection with night work.....	19.20	
Draftsmen.....	734.69	
		<u>2,553.89</u>
Total.....		20,656.95
NEW YORK, February 6, 1905.		

Details of account No. 82, salaries of clerks, New York, for the year 1902.

Treasurer's office:		
Teller and messenger.....	\$660.00	
Bond of messenger.....	10.80	
		<u>\$670.80</u>
Secretary's office:		
Assistant to secretary.....	368.00	
Stenographers and clerks.....	1,431.22	
		<u>1,799.22</u>
Auditor's office:		
Auditor.....	3,000.00	
Clerks.....	7,855.32	
		<u>10,855.32</u>
Traffic manager's office:		
Claim clerk.....	1,380.00	
Purchasing agent.....	1,200.00	
Inspecting engineer's office:		
Inspecting engineer.....	1,800.00	
Draftsmen.....	600.00	
		<u>2,400.00</u>
Christmas gratuities.....		95.00
Total.....		18,400.34
NEW YORK, February 6, 1905.		

REPORT OF JOSEPH L. BRISTOW.

69

Details of account No. 82, salaries of clerks, New York, for the year 1903.

Treasurer's office:	
Teller and messenger.....	\$760. 00
Bond of messenger.....	10. 00
	<u>\$770. 00</u>
Assistant secretary's office:	
Stenographers and clerks.....	1, 499. 97
Auditor's office:	
Auditor.....	3, 000. 00
Clerks.....	8, 646. 33
Extra compensation in connection with night work.....	106. 99
	<u>11, 753. 32</u>
Traffic manager's office:	
Claim agent.....	1, 410. 00
Purchasing agent.....	1, 375. 00
Inspecting engineer's office:	
Inspecting engineer.....	1, 800. 00
Draftsmen.....	91. 07
	<u>1, 891. 07</u>
Christmas gratuities.....	112. 50
Total.....	<u>18, 811. 86</u>

NEW YORK, February 6, 1905.

Details of account No. 82, salaries of clerks, New York, for the year 1904.

Treasurer's office:	
Teller and messenger.....	\$850. 00
Bond of messenger.....	10. 00
	<u>\$860. 00</u>
Assistant secretary's office:	
Stenographers and clerks.....	1, 908. 16
Extra compensation in connection with night work.....	3. 00
	<u>1, 911. 16</u>
Auditor's office:	
Auditor.....	3, 075. 00
Clerks.....	8, 792. 50
Extra compensation in connection with night work.....	481. 74
	<u>12, 349. 24</u>
Traffic manager's office:	
Claim agent.....	1, 500. 00
Claim agent: typewriting fees.....	3. 00
	<u>1, 503. 00</u>
Purchasing agent's office:	
Purchasing agent.....	1, 500. 00
Stenographers and clerks.....	72. 68
	<u>1, 572. 68</u>
Inspecting engineer's office:	
Inspecting engineer.....	1, 800. 00
Clerk.....	272. 00
	<u>2, 072. 00</u>
Christmas gratuities.....	210. 00
Total.....	<u>20, 478. 08</u>

NEW YORK, February 6, 1905.

Details of account No. 88, salaries of officers, New York, for the year 1896.

President.....	\$10, 000. 00
Vice-president and general manager.....	\$10, 000. 00
Expenses.....	842. 37
	<u>10, 842. 37</u>
Secretary.....	7, 000. 00
Traffic manager.....	5, 000. 00
Expenses.....	408. 65
	<u>5, 408. 65</u>

Treasurer.....	\$4,500.00	
Extra compensation re new system of accounting.....	250.00	
Christmas gratuity.....	250.00	
Premium on bond.....	187.50	
		\$5,187.50
Chief engineer seven months, seven days.....		1,505.35
Total.....		39,943.87

NEW YORK, February 2, 1905.

Details of account No. 88, salaries of officers, New York, for the year 1897.

President.....	\$10,000.00	
Vice-president and general manager.....		10,000.00
Secretary.....	\$7,000.00	
Extra compensation during absence of vice-president and general manager in Europe.....	580.64	
Expenses.....	4.80	
		7,585.44
Treasurer.....	4,700.00	
Premium on bond.....	187.50	
		4,887.50
Traffic manager:		
Mr. Muir, eleven months.....	5,500.00	
Mr. Walker, one month.....	416.66	
Expenses.....	20.50	
		5,937.16
Total.....		38,410.10

NEW YORK, February 2, 1905.

Details of account No. 88, salaries of officers, New York, for the year 1898.

President.....	\$10,000.00	
Vice-president and general manager.....		10,000.00
Assistant general manager and secretary.....	\$7,000.00	
Extra compensation during absence in Europe of Mr. Whaley, vice-president and general manager.....	975.81	
		7,975.81
Traffic manager.....	5,000.00	
Extra compensation while on Isthmus.....	147.76	
		5,147.76
Treasurer.....	4,700.00	
Extra compensation while on Isthmus.....	183.21	
Premium on bond.....	125.00	
		5,008.21
Total.....		38,131.78

NEW YORK, February 6, 1905.

Details of account No. 88, salaries of officers, New York, for the year 1899.

President.....	\$10,000.00	
Vice-president and general manager, three months.....	\$2,500.00	
First vice-president, nine months.....	4,125.00	
(Mr. Whaley).....		6,625.00
Assistant general manager and secretary, four months.....	2,333.34	
Extra compensation during absence in Europe of Mr. Whaley.....	500.00	
Second vice-president and secretary, eight months.....	5,666.67	
(Mr. Drake).....		8,500.01
General manager, May 12 to December 31.....		4,459.67

REPORT OF JOSEPH L. BRISTOW.

71

Traffic manager.....		\$5,000.00
Treasurer.....	\$4,700.00	
Premium on bond.....	81.25	
		<hr/> 4,781.25
Total.....		39,365.93

NEW YORK, February 6, 1905.

Details of account No. 88, salaries of officers, New York, for the year 1900.

President.....		\$10,000.00
First vice-president.....		5,500.00
Second vice-president and secretary.....		8,500.00
General manager.....		7,000.00
Traffic manager, four months.....	\$1,666.66	
Traffic manager, eight months.....	4,000.00	
		<hr/> 5,666.66
Treasurer, three months.....	1,175.00	
Treasurer, nine months.....	3,900.00	
Premium on bond.....	100.00	
		<hr/> 5,175.00
Total.....		41,841.66

NEW YORK, February 6, 1905.

Details of account No. 88, salaries of officers, New York, for the year 1901.

President.....		\$10,000.00
First vice-president, four months.....	\$1,375.00	
In charge of European department, four months.....	546.60	
		<hr/> 1,921.60
Second vice-president and secretary.....		8,500.00
General manager.....		7,000.00
Traffic manager.....		6,000.00
Treasurer.....	5,200.00	
Premium on bond.....	85.50	
		<hr/> 5,285.50
		38,707.10
Less credit.....		3.09
Total.....		<hr/> 38,704.01

NEW YORK, February 6, 1905.

Details of account No. 88, salaries of officers, New York, for the year 1902.

President.....		\$10,000.00
First vice-president, charged against Paris office.....		
Second vice-president and secretary.....		8,500.00
General manager.....		7,000.00
Traffic manager.....		6,000.00
Treasurer.....	\$5,200.00	
Premium on bond.....	135.00	
		<hr/> 5,335.00
Assistant secretary, April 7 to December 31.....		1,320.00
Total.....		<hr/> 38,155.00

NEW YORK, February 6, 1905.

Details of account No. 88, salaries of officers, New York, for the year 1903.

President.....	\$10,000.00	
First vice-president, charged against Paris office.....		
Second vice-president and secretary.....	8,500.00	
General manager.....	7,000.00	
Traffic manager.....	6,000.00	
Treasurer.....	\$5,200.00	
Premium on bond.....	125.00	
Assistant secretary.....	5,325.00	
	1,810.00	
Total.....		38,635.00

NEW YORK, February 6, 1905.

Details of account No. 88, salaries of officers, New York, for the year 1904.

President.....	\$10,000.00	
First vice-president, charged against Paris office.....		
Second vice-president and secretary.....	8,500.00	
General manager.....	7,000.00	
Traffic manager.....	6,000.00	
Treasurer.....	\$5,200.00	
Premium on bond.....	125.00	
Assistant secretary, three months.....	450.00	5,325.00
Assistant secretary, nine months.....	1,810.00	
		2,260.00
Total.....		39,085.00

NEW YORK, February 6, 1905.

Memorandum re agency expenses steamship line, New York.

Account No. 51. Buildings, docks, and wharves—repairs and rent of: This account includes rent and repairs of pier in New York and one-third of the rent of office at No. 24 State street, New York.

Account No. 55. Insurance: Includes insurance on pier furniture and fixtures, merchandise on pier and afloat in New York Harbor.

Account No. 58. Labor, general: This account includes wages of watchmen, gate keepers, porters, messengers, etc., employed on pier, New York.

Account No. 61. Salaries, agents and clerks: This account includes salaries of terminal superintendent, supply clerk, receiving and delivery clerks, etc., stationed on pier, New York, and salaries of freight solicitors, ticket agent, freight cashier, and other freight office employees at No. 24 State street, New York.

Panama Railroad Steamship Line, statement of agency expenses (New York) for the years 1896 to 1903, inclusive, and eleven months of 1904.

Account.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	11 months, 1904.
50. Advertising.....	\$4,118.54	\$1,891.81	\$1,302.22	\$1,231.50	\$2,164.35	\$1,918.49	\$1,071.22	\$1,883.97	\$1,729.58
51. Buildings, docks and wharves, repairs and rent.....	31,118.54	37,613.72	42,300.22	41,906.77	41,732.86	42,012.79	41,571.97	32,450.76	22,722.40
52. Buildings, docks and wharves, other expenses.....	5,139.64	4,140.87	3,888.30	4,148.93	4,454.16	4,040.13	4,076.42	4,119.88	5,965.66
53. Commissions, passengers.....	1,097.92			71.80					
54. Commissions, freight.....	1,001.97	1,052.50	790.48	730.75	1,307.86	1,739.21	1,774.75	1,606.75	1,164.75
55. Insurance.....		2.00				163.00		1.50	
56. Injuries to persons.....	108.28	34.00	25.00	477.30	30.00	73.00	147.85	65.00	57.35
57. Incidentals.....	12,800.46	11,343.47	10,243.39	15,134.56	17,374.27	16,643.71	16,061.88	15,300.82	15,308.85
58. Labor, general.....									3.00
59. Legal services and expenses.....	117.76				43.30	284.81	139.83	83.85	
60. Loss and damage.....	31,124.93	28,572.90	26,121.17	27,173.18	24,932.47	23,740.59	24,257.50	25,079.35	22,886.13
61. Salaries, agents and clerks.....	1,048.07	1,028.21	906.22	1,044.86	1,451.00	1,410.27	1,121.49	1,550.27	2,176.22
62. Stationery and printing.....	91.73	16.10	12.85	7.41	13.17	112.60	54.00	52.36	78.28
63. Telegrams and cables.....									
Total.....	88,387.84	85,985.51	85,539.73	91,574.46	93,503.44	92,164.00	90,916.11	82,254.47	70,094.70

a Credit.

NEW YORK, February 1, 1905.

REPORT OF JOSEPH L. BRISTOW.

EXHIBIT B 6.

PANAMA RAILROAD COMPANY.

Salaries of general officers on the Isthmus.

Executive officers:	Per annum.
General superintendent.....	\$6,000.00
Secretary to general superintendent and land agent.....	3,300.00
Local auditor.....	2,763.53
Cashier.....	2,700.00
Transportation department:	
Assistant superintendent.....	3,600.00
Train master.....	2,280.00
Acting freight agent and port captain, La Boca.....	2,700.00
Assistant freight agent and port captain, Colon.....	2,700.00
Mechanical department:	
Master mechanic.....	2,700.00
Road department:	
Road master.....	2,700.00
Supply department:	
Commissary.....	2,700.00
Legal department:	
Counsel, Panama.....	1,728.00
Lawyer, Panama.....	1,464.00
Real estate lawyer, Colon.....	1,200.00

FEBRUARY 6, 1905.

Executive offices, Colon.

	Per month.
Robert Yung, secretary to general superintendent and land agent.....	^a \$3,300.00
1887, April. Entered service of company as draftsman in engineer's department.....	125.00
Latter part of year clerk in roadmaster's office.....	150.00
Salary increased a few months later to.....	175.00
1889, August. Acting secretary to general superintendent.....	200.00
1890, January 1. Secretary to general superintendent.....	225.00
1892, January 1. Secretary to general superintendent and land commissioner.....	250.00
1893, December. Salary reduced after completion of work on fire zone, Colon.....	225.00
1894, July. Reduced account general reduction of 10 per cent.....	202.50
1896. Salary increased.....	225.00
1900, January 1. Land agent.....	250.00
1905, January 1. Land agent; salary increased.....	275.00

FEBRUARY 6, 1905.

Michael Delevante, local auditor.....	^a \$2,700.00
1890, April 1. Entered service of company as clerk.....	150.00
1890, October. Increase in salary.....	160.00
1893, August, to November 16, 1893. Acting auditor.....	200.00
1893, November 16. Clerk.....	160.00
1894, July. Clerk.....	144.00
1895, July. Clerk.....	160.00
1896, May 1. Local auditor.....	200.00
1904, October 1. Increase in salary.....	225.00

FEBRUARY 6, '905.

R. H. Wardlaw, cashier.....	^a \$2,700.00
1889, March 1. Entered service of company as train check clerk.....	150.00
1889, March 15. Local express clerk, Panama.....	150.00
1891, September. Clerk in auditing office.....	165.00
1897, October 4. Cashier.....	200.00
1904, October 1. Salary increased.....	225.00

FEBRUARY 6, 1905.

^a Per annum.

Transportation department.

	Per month.
H. G. Prescott, assistant superintendent.....	^a \$3,600.00
1889, January. Entered service of company as operator.....	165.00
1889, to November, 1892. Train dispatcher.....	200.00
1892, November, to November, 1893. Depot master and operator at Panama.....	200.00
1893, November, to June, 1894. Depot master and operator at Panama.....	190.00
1894, June, to April 1, 1900. Depot master and operator at Panama.....	171.00
1900, April 1. Train master and electrician.....	200.00
1901, August 1. Assistant superintendent.....	300.00

FEBRUARY 6, 1905.

K. W. Bergin, train master.....	^a 2,280.00
1888, March 1. Telegraph operator, Gatun.....	165.00
1889, February. Assistant train dispatcher.....	175.00
1889, April. Chief dispatcher.....	190.00
1889, July. Chief dispatcher.....	200.00
1890, November 27, to May 9, 1891. Acting train master.....	
1891, July 25, to October 28, 1891. Acting train master.....	
1892, March 23, to July 1, 1902. Acting train master.....	250.00
1892, November 14, to March 9, 1893. Acting train master.....	
1893, March 25, to July 1, 1893. Acting train master.....	
1893, August 27, to November 17, 1893. Acting train master.....	215.00
1894, April 15, to July 7, 1894. Acting train master.....	
1895, June 24, to September 26, 1895. Acting train master.....	200.00
1895, October 5, to December 1, 1895. Acting train master.....	
(When not filling position of acting train master pay for intermediate periods was that of train dispatcher.)	
1890, November 27, to December, 1893.....	200.00
1893, December. Train dispatcher.....	190.00
1894, July. Train dispatcher.....	171.00
1901, August 1. Train master and chief dispatcher.....	190.00

FEBRUARY 6, 1905.

James St. C. Hunt, acting freight agent and port captain at La Boca.....	^a 2,700.00
1895, January 30. Entered service of company as freight clerk.....	60.00
1895, September 27. Purser steamship <i>Advance</i>	90.00
1901, March 1. Chief clerk at La Boca.....	175.00
1904, June 1. Acting freight agent and port captain at La Boca.....	225.00

FEBRUARY 6, 1905.

Transportation department, Colon.

P. E. Cruchley, assistant freight agent and port captain at Colon.....	^a \$2,700.00
1882, October. Entered service of company as assistant waybill clerk.....	60.00
1884, salary increased account of extra duties.....	125.00
1885, appointed waybill clerk.....	150.00
1886, salary increased.....	175.00
1888, acted as clerk in charge of freight house for three months.....	200.00
1890, salary reduced account depression in business.....	160.00
1893, September. Salary reduced account depression in business.....	150.00
1897, July. Salary reduced account depression in business.....	135.00
1897, May. Promoted to chief clerk.....	150.00
1901, October 29. Appointed assistant freight agent and port captain, Colon.....	200.00
1904, June 1. Salary increased.....	225.00

FEBRUARY 6, 1905.

Mechanical department, Colon.

Philip G. Baker, master mechanic.....	^a \$2,700.00
1899, October 11. Entered service of company as machinist.....	^b 4.50
1900, November 20. Superintendent machinist, La Boca, during absence of Superintendent Moore.....	^b 4.50

^a Per annum.^b Per day.

Phillip G. Baker, master mechanic—Continued.	Per month
1901, January 1. General foreman, Colon shops.....	\$100.00
1901, October 1. Acting master mechanic.	
October 29. Appointed master mechanic with salary effective October 1, 1901.....	225.00
FEBRUARY 6, 1905.	
F. S. Higbid, road master.....	a 3,300.00
1898, May 2. Assistant engineer, La Boca construction.....	200.00
1898, September 16. Road master.....	225.00
1901, October 1. Road master.....	275.00
FEBRUARY 6, 1905.	

Commissary department, Colon.

Ricardo Bernudez, commissary.....	a\$2,700.00
1886, June 11 to October, 1890. Entered service of company as junior clerk, auditor's office.....	silver 45.00
Increased to.....	do 75.00
Increased to.....	gold 75.00
Increased to.....	do 90.00
Increased to.....	do 100.00
1890, October. Increased to.....	do 110.00
1894, July. Decreased to.....	do 99.00
1895, July. Increased to.....	do 110.00
1898, November 15. Chief clerk.....	do 130.00
1901, May 1. Commissary.....	do 200.00
1905, January 1. Commissary.....	do 225.00
FEBRUARY 6, 1905.	

Panama Railroad Company, legal department.

Pablo Arosemena, counsel, Panama.....	\$144.00
F. Mutis-Duran, lawyer, Panama.....	122.00
A. N. Henriquez, real estate lawyer, Colon.....	100.00
FEBRUARY 6, 1905.	

EXHIBIT B 7.

Panama Railroad Company, general superintendent.

	Per annum.
1876 to 1880, Brandon Mozley.....	\$8,000.00
1880 to 1884, H. A. Woods.....	8,000.00
1885 (six months), J. J. Iribe.....	10,000.00
1885 to 1886, George A. Burt.....	8,000.00
Increased to.....	10,000.00
1886 to 1887, Frank G. Ward.....	10,000.00
1887 to 1895, A. L. Rives.....	12,000.00
Increased in 1888.....	16,000.00
1895 to 1905, James R. Shaler.....	5,000.00
Increased in 1896.....	6,000.00
FEBRUARY 6, 1905.	
John C. Warren, assistant superintendent November 14, 1895, to April, 1900..	4,000.00
R. G. Ward, engineer and road master, 1896 to 1898.....	3,300.00
1890 to 1893, David G. Mott, master mechanic.....	3,600.00
1898 to 1899, Percy Webb, master mechanic.....	2,700.00
1899 to 1901, A. Hendee, master mechanic.....	3,000.00
FEBRUARY 6, 1905.	

a Per annum.

	Per annum.
1896 to 1901, James A. Crossman, freight agent and port captain at Colon...	\$4,200 00
1898 to 1904, James R. Beers, freight agent and port captain at La Boca and Panama.....	4,200 00
1887 to 1895, James S. Gilbert, commissary.....	3,000 00
Salary reduced in 1896 to.....	2,400 00

EXHIBIT B 8.

Question. Amount of money for labor expended on the Isthmus in detail as to the kind of labor.

Attached statements in connection with the classification of disbursement accounts will show, as far as we are able to without an exhaustive research, which is understood to be not required, amounts expended on the Isthmus for labor.

(See following pages.)

Panama Railroad Company, statement showing details of general expenses, Isthmus agency, for the years 1896 to 1903, inclusive, and eleven months of 1904.

Account.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	11 months, 1904.
101. Advertising.....	\$27.80	\$29.00	\$14.50	\$15.60	\$15.12	\$8.21	\$7.58	\$7.65	\$30.94
102. Clerks and attendants, salaries of.....	11,959.49	12,572.38	12,580.50	13,286.24	12,725.58	12,516.09	12,636.90	12,111.21	11,895.06
103. Cablegrams.....	472.19	6,201.06	596.21	889.34	174.45	415.33	80.36	487.71	694.29
104. Hospital service.....	5,912.54	1,545.80	6,280.09	7,397.02	7,997.57	7,576.73	8,405.95	9,225.95	9,876.62
105. Incidentals.....	3,436.40	2,765.05	1,031.00	2,300.00	37.05	93.89	3.98	62.07	724.56
106. Legal expenses.....	3,068.00	3,704.09	2,940.90	2,930.00	2,574.93	2,485.74	3,454.46	1,837.70	2,962.71
107. Miscellaneous.....	11,799.33	12,368.38	11,403.18	3,414.09	2,647.50	3,431.09	4,403.33	4,001.06	3,920.43
108. Officers, salaries of.....	1,647.53	601.06	681.45	12,331.08	11,673.07	11,442.40	11,064.88	11,082.94	10,298.99
109. Office expenses and supplies.....	1,176.23	500.16	1,067.56	884.32	1,044.20	1,157.59	1,315.62	1,383.17	1,527.21
110. Stationery and printing.....	431.88	39,784.46	41,036.49	42,094.11	40,216.25	40,378.20	42,838.36	41,356.41	43,271.94
111. Wages of stewards and supplies, heads of departments.....									
Total.....									

New York, February 2, 1905.

Panama Railroad Company, statement showing expenses in detail of conducting transportation for the years 1896 to 1903, inclusive, and eleven months of 1904.

Account.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	11 months, 1904.
115. Advertising.....	\$1,422.90	\$1,395.00	\$1,423.00	\$1,262.40	\$1,256.72	\$1,288.04	\$1,260.98	\$1,273.96	\$1,312.56
116. Clearing wrecks.....	842.41	30.5	22,537.36	25.88	72.46	158.00	343.02	27.47	53.03
117. Engineers and firemen.....	21,050.54	22,032.77	22,391.36	22,391.36	23,446.97	29,176.56	29,784.11	28,065.87	28,197.37
118. Fuel for locomotives.....	25,632.55	33,392.58	24,224.47	24,224.47	32,382.56	44,345.09	39,703.77	38,378.50	40,340.50
119. Freight agents and clerks, Colon.....	21,253.04	19,846.46	20,201.81	20,405.05	18,426.55	19,079.57	17,112.67	17,408.73	17,130.23
120. Freight agents and clerks, Panama.....	22,043.65	21,750.97	25,296.99	25,935.30	26,879.13	28,936.17	30,393.05	29,001.14	27,895.97
121. Injuries to persons.....	136.03	98.12	78.46	171.84	5,512.70	1,132.08	461.82	154.75	402.64
122. Incidentals.....	857.30	700.00	859.94	898.73	1,531.97	1,122.74	649.05	535.20	634.29
123. Labor, Colon station.....	22,258.37	27,810.75	29,241.21	40,430.98	43,949.01	63,126.74	45,780.19	42,771.54	57,163.36
124. Labor, Panama station.....	29,067.68	35,804.85	44,717.53	56,115.31	57,533.22	63,227.67	58,133.84	60,062.52	71,005.63
125. Oil, tallow, and waste.....	647.25	572.88	717.53	791.06	1,092.59	1,872.67	1,313.57	1,392.60	1,065.43
126. Other supplies for locomotives.....	795.18	572.88	789.56	743.80	1,575.19	876.35	879.52	7,084.13	1,023.99
127. Roundhouse men.....	4,483.86	5,199.37	5,138.22	5,143.05	6,383.52	8,211.49	7,592.38	7,100.46	6,673.04
128. Superintendence and clerks.....	3,834.66	3,091.89	4,201.87	3,159.90	3,872.34	4,322.13	4,300.13	4,253.32	3,756.24
129. Switchman, yard man, and yard switchman.....	25,506.63	28,146.49	29,306.16	26,406.16	27,883.17	33,257.57	40,922.78	41,253.31	44,554.39
130. Station agents and clerks.....	19,307.96	14,376.47	15,122.64	15,410.49	13,801.31	17,659.68	14,421.67	16,715.51	14,361.31
131. Station supplies and expenses.....	4,742.46	2,991.24	2,943.40	7,495.15	12,492.50	17,146.25	10,577.61	11,117.07	15,973.05
132. Stationery and printing.....	2,700.86	2,934.39	2,643.23	2,531.76	2,364.35	3,706.24	3,253.90	3,324.35	4,435.91

133. Train conductors, baggage-men, flagmen, and brakemen.....	14,120.42	14,520.22	15,012.4	15,141.04	14,571.82	15,285.34	17,548.07	16,898.59	19,291.32
134. Train supplies and expenses.....	1,112.66	2,258.37	2,014.12	2,127.85	2,717.57	3,310.35	3,586.08	3,392.65	3,993.45
135. Telegraph expenses.....	5,941.58	5,970.94	6,143.20	6,168.99	8,228.96	8,726.72	8,788.32	8,825.30	9,596.27
136. Water supply for locomotives.....	2,678.13	2,879.17	3,092.98	2,727.39	3,230.02	3,658.18	3,658.18	4,578.05	4,313.96
137. Rent of buildings.....						834.55	1,007.72	1,055.90	1,211.66
Total.....	228,335.10	246,686.30	250,886.66	278,961.09	309,516.83	373,022.88	342,321.45	338,303.93	375,996.30

NEW YORK, February 2, 1905.

Panama Railroad Company, statement showing expenses in detail of maintenance of equipment for the years 1896 to 1903, inclusive, and eleven months of 1904.

Account.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	11 months, 1904.
150. Freight cars, repairs and renewals of.....	\$13,075.34	\$26,523.09	\$42,016.88	\$35,139.21	\$50,472.81	\$59,725.32	\$44,625.38	\$44,533.87	\$40,086.67
151. Inc. rentals.....		37.55							
152. Locomotives, repairs and renewals of.....	12,018.69	13,780.72	13,762.71	10,442.56	30,986.78	34,210.19	39,491.18	36,761.97	35,063.38
153. Passenger cars, repairs and renewals of.....	7,412.82	9,012.27	7,715.98	7,438.39	7,439.25	9,448.36	12,573.03	12,531.57	12,894.93
154. Superintendence and clerical.....	9,669.76	10,431.89	13,027.42	11,498.96	10,882.82	12,340.32	11,363.86	11,545.96	11,547.35
155. Stationery and printing.....	51.87	163.71	162.01	189.46	234.54	213.69	252.78	227.72	252.78
156. Shop expenses.....	1,498.96	1,862.11	2,104.81	2,134.02	2,791.58	1,701.66	806.79	740.66	641.21
157. Shop machinery and tools, repairs and renewals of.....	2,053.55	4,712.48	2,188.48	2,894.45	12,921.02	8,835.49	7,804.69	5,259.34	8,411.06
158. Work cars, repairs and renewals of.....	746.45	573.62	944.80	1,321.27	894.19	540.83	889.51	2,124.60	1,911.02
Total.....	53,965.22	67,406.99	69,919.09	71,269.44	116,518.87	116,319.83	118,080.35	113,765.69	111,714.40

NEW YORK, February 2, 1905.

208. Supplies.....	6,445.91	7,250.99	5,710.64	10,102.17	12,655.15	7,999.07	3,338.56	454.07	3,428.84
209. Superintendence and clerks.....	3,222.34	3,600.00	3,425.25	4,152.32	2,433.57	1,386.29	2,667.03	3,786.22	3,786.22
210. Subsistence, tugs.....	1,973.59	1,484.90	2,126.00	1,752.00	1,816.30	1,944.30	1,829.09	1,854.39	1,854.39
211. Subsistence, laborers Isla de Nao.....	10,895.34	11,785.12	9,946.51	10,105.18	12,451.80	2,760.42	182.84	45.00	672.52
212. Tugs, repairs and renewals of.....	5,688.19	462.51	386.22	2,697.32	2,433.57	1,386.29	2,667.03	3,786.22	3,786.22
213. Tugs, expenses while out of commission.....	681.64	583.05	1,582.85	915.12	401.31	270.00	72.25	467.30	437.70
214. Wages of crews.....	20,288.16	15,494.17	17,930.00	16,796.23	16,967.78	10,113.77	9,540.97	6,771.80	6,396.26
Total.....	116,803.18	105,804.28	97,790.52	111,270.28	144,745.65	104,143.15	53,917.97	39,143.17	90,732.97

a Credit.

NEW YORK, February 3, 1905.

Statement showing expenses of docks and wharves in detail for the years 1896 to 1903, inclusive, and eleven months of 1904.

Account.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	11 months, 1904.
220. Docks and wharves, Colon, repairs and renewals of.....	\$28,423.83	\$27,654.30	\$27,110.87	\$18,556.25	\$12,686.86	\$5,398.73	\$15,390.30	\$13,505.96	\$5,872.19
221. Docks and wharves, Panama, repairs and renewals of.....	16,205.05	6,400.06	2,293.76	2,005.01	6,080.18	3,605.18	295.36	5,971.22	12,351.91
222. Harbor master and light-house keeper.....	1,121.67	844.85	878.65	847.28	870.00	870.00	870.00	894.51	803.85
223. Light-house, repairs and renewals of.....	8.03	5.73	.....	.....	235.04	25.98	12.79	.....	.....
224. Light-house supplies.....	90.92	70.91	61.31	103.12	107.41	131.40	294.74	91.75	73.19
225. La Boca pier, repairs and renewals of.....	.....	.....	.....	230.89	.....	1,838.43	4,644.68	1,454.87	7,511.62
226. La Boca basins, dredging of.....	.....	.....	.....	.....	.....	63,246.84	39,044.41	43,698.87	27,392.75
227. Clappets and dredges, repairs and renewals of.....	.....	.....	.....	.....	.....	5,780.56	28,097.50	25,503.27	16,356.27
228. Buoy, repairs and renewals of.....	.....	.....	.....	.....	161.62	108.35	983.44	395.12	255.15
229. Rental of dredges, clappets, etc.....	.....	.....	.....	.....	.....	3,181.57	17,555.07	6,977.68	5,110.81
Total.....	45,840.50	34,981.75	30,344.59	22,111.75	20,800.00	84,247.47	107,028.19	96,453.27	78,727.84

NEW YORK, February 3, 1905.

Statement showing expenses of real estate for the years 1896 to 1903, inclusive, and eleven months of 1904.

Account.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	11 months, 1904.
230. Colon buildings, repairs and renewals of.....	\$5,080.77	\$7,575.91	\$10,379.55	\$6,581.81	\$13,704.33	\$13,599.23	\$11,012.81	\$12,555.85	\$30,856.28
231. Colon buildings, repairs of existing furniture.....	484.75	2,214.57	329.06	154.35	297.73	1,045.77	562.65	1,045.05	1,040.31
232. Legal and other expenses.....	6,871.21	5,144.03	5,704.83	9,843.37	8,367.68	8,249.40	9,536.11	10,540.62	9,608.11
233. Freight on water.....	155.80	188.52	33.27	192.93	278.92	77.92	178.16	543.22	272.92
Total.....	12,602.53	15,123.03	16,446.71	16,792.46	22,618.66	22,922.32	21,399.74	24,773.74	32,398.72

NEW YORK, February 3, 1905.

Panama Railroad Company, statement showing expenses in detail re loading and discharging vessels at La Boca, for the years 1902 to 1904 (eleven months), inclusive.

Account.	1902.	1903.	11 months, 1904.
250. Transportes La Boca pier, fuel, water, and supplies.....	\$1,429.12	\$2,014.69	\$1,292.18
251. Transportes La Boca pier, repairs and renewals of.....	2,943.79	5,275.51	8,321.50
252. Labor on pier.....	9,057.24	7,952.19	9,781.80
253. Labor on ships.....			
254. Superintendence and clerks.....		62.45	91.59
255. Other supplies and expenses.....			
256. Expenses transferring freight by lighters between ships lying at wharf and shore.....	3,946.55	529.18	1,039.11
Total.....	17,376.70	15,834.02	20,526.23

NEW YORK, February 2, 1905.

Analysis of Isthmus pay rolls for the month of November, 1904.

Account debited and kind of labor.	Silver.	Gold.	Total.
Machine shops, Colon: Shop men.....	\$6,869.25	\$3,394.85	\$6,829.48
Supplies: Commissary, clerks, storekeepers, porters, watchmen, laborers, etc.....	2,313.47	515.00	1,671.73
Coal: Handling.....	1,347.25		673.62
Ice: Ice plant, engineers, tankmen, storekeeper, ice servers, laborers, draymen.....	472.50	54.16	290.41
Machine shops, La Boca: Shop men.....	9,803.51	248.78	5,150.53
Loading and discharging vessels at La Boca: Stevedoring.....	2,370.64		1,185.32
Loading and discharging vessels at Colon: Stevedoring.....	12,663.36	508.25	6,839.93
Agency expenses, Colon station: Handling freight.....		543.50	543.50
General expenses:			
Colon station gang.....	190.44		99.72
Watchmen.....	52.00		26.00
Hospital service.....	102.80	339.00	390.40
Legal expenses.....		266.00	266.00
Officers and clerks.....		2,247.00	2,247.00
Mount Hope Cemetery superintendent.....	96.90		48.45
Conducting transportation:			
Engineers and firemen.....		2,809.33	2,809.33
Freight agents and clerks, Colon.....	268.00	1,526.90	1,660.90
Freight agents and clerks, Panama.....	706.20	2,060.07	2,413.17
Lampmen (Incidentals).....	66.00		33.00
Handling freight, Colon station.....	12,128.20	504.53	6,568.63
Handling freight, Panama station.....	10,318.53	1,688.20	6,847.47
Roundhouse men.....	563.20	347.50	629.10
Superintendence and clerks.....		300.00	300.00
Switchmen, yardmen, and yard watchmen.....	7,687.51	511.71	4,355.41
Station agents and clerks.....	1,304.34	534.25	1,186.42
Lighting stations and yards.....	824.53	123.32	535.58
Conductors, baggagemen, flagmen, and brakemen.....	1,549.75	1,163.34	1,938.22
Car cleaners.....	136.34		68.17
Train dispatchers, telegraph operators, and messengers.....	107.50	826.59	880.34
Attendants, pumping station line of road.....	77.00	90.00	128.50
Maintenance of equipment:			
Labor repairing freight cars, machine shops, Colon.....	663.52	288.61	570.42
Labor repairing locomotives.....	344.70		172.32
Labor repairing passenger cars.....	156.02	65.91	143.92
Superintendence and clerks.....	165.00	980.59	1,063.05
Watchmen.....	105.80		52.90
Maintenance of way and structures:			
Labor repairing bridges and culverts.....	23.30	70.30	81.95
General offices.....	68.40		34.20
Labor repairing machines and tools.....	16.00		8.00
Repairs of roadway and tracks, machine shops, Colon.....		93.80	93.80
Repairs of roadway and tracks, conductor.....		69.30	69.30
Repairs of roadway and tracks, section gangs.....	6,843.75		3,421.88
Superintendence and clerks.....		585.58	585.58
Repairs to station buildings and attendant buildings.....	36.00		18.00
Repairs to station buildings—			
Bridge gang.....	667.81		333.90
Dock carpenter's gang.....	265.47	130.00	262.74
House carpenter's gang.....	118.64		59.32
Repairing shop buildings, water and fuel stations—			
Bridge gang.....	545.21		272.61
Dock carpenter's gang.....	510.19	80.00	335.09
Repairing section tool houses, bridge gang.....	145.00		72.50
Repairing telegraph, electrician and lineman.....	152.00	54.19	130.19
Lighterage:			
Labor on cargo, Panama, cranes, m, watchmen, and sailors.....	1,275.70		637.85
Superintendence and clerks.....		220.83	220.83
Tug Bolivar, wages and crew and subsistence.....	410.62	567.50	772.81

Analysis of Isthmus pay rolls for the month of November, 1904—Continued.

Account debited and kind of labor.	Silver.	Gold.	Total.
Docks and wharves:			
Repairs, Colon—			
Dock carpenter's gang.....	\$1,197.70		\$598.85
Engineer foremen.....		\$215.00	215.00
Repairs, Panama, bridge gang.....	20.30		10.15
Lighthouse-keeper and harbor clerk.....		72.50	72.50
Dredging La Boca basin and channel.....	4,333.98		2,166.99
Real estate:			
Repairs to Colon buildings, dock carpenter's gang and house			
carpenter's gang.....	1,266.11	100.00	733.05
Repairs to furniture in buildings.....	31.67		15.84
Legal expenses.....		350.00	370.00
Watchmen.....	63.40	35.00	66.70
Commissions for collecting rents.....	222.30		111.15
House carpenter's gang.....		125.00	125.00
Commissary department.....	147.00		73.50
Water supplied shipping: Labor.....	154.36		77.18
Installation of telegraph and telephone plant: Telegraph gang.....	1,213.50		606.75
Telegraph and telephone service: Telegraph gang.....		488.39	488.39
Y at La Boca, 351: General labor.....	320.28	254.85	414.99
Ancon electric light, 353: Installation of electric light at Ancon ..	129.00	108.33	172.83
Duplicate ice plant, 354: General labor.....	366.40		183.20
Total.....	^a 93,907.45	25,557.96	^b 72,511.69

^a Silver to gold at 200 exchange.^b Gold.*Panama Railroad Company, classification of disbursement accounts.*

STEAMER EXPENSES.

1. Ballast: Stone or sand ballast bought for stiffening or dead weight. Includes labor, loading, and unloading.
2. Custom-house and port charges: Salaries and fees of brokers, tonnage dues, entrance and clearance fees, consular fees, certifying manifests of all kinds, harbor master's and port warden's fees, bills of health, light dues, permits, stamps for clearance and stamps of all kinds, inspection and examination of passengers and crew by Government officials, passenger tax, and other fees paid to Government or State officials in connection with steamers' business, except as provided for by accounts Nos. 17 and 18.
3. Docking: Payment for use of dry dock.
4. Equipment, deck department: All material and supplies furnished for the use of the deck department, as enumerated below:

Armaments, belts for pistols.
Armaments, cutlasses.
Armaments, guns.
Armaments, pistols.
Armaments, rifles.
Armaments, spgs. and rmrs.
Anchors, patent.
Anchors, kedge.
Anchors, stream.
Awnings, boat.
Awnings, ship.
Axes, handled.
Alidade.
Bags, boat, sail.
Bags, color.
Barometers.
Bars, awning.
Bars, capstan.
Bars, crow.
Blocks, assorted.
Boats, iron life.
Boats, wood.
Bolts, eye.
Bolts, ring.
Books, log.
Books, signal.
Boxes, bread, for boats.

Boxes, cleaning.
Breakers, water.
Buckets, boat.
Buckets, deck.
Buckets, fire.
Butts, water.
Buoys, life.
Cans, jet.
Cables, chain.
Calipers.
Chain.
Charts, various.
Chronometers.
Clocks.
Cloths, for lookout.
Compasses, boat.
Compasses, pat. liqu.
Compasses, brass.
Covers, boat.
Covers, binnacle.
Covers, match.
Covers, hay.
Covers, mast.
Covers, sail.
Covers, wheel.
Curtains, weather.
Cushions, boat.

Dividers.
 Drag.
 Fenders, cork.
 Fenders, wood.
 Flags, American.
 Flags, burgee.
 Flags, blue peter.
 Flags, Chinese.
 Flags, Colombia.
 Flags, Costa Rica.
 Flags, English.
 Flags, French.
 Flags, Guatemala.
 Flags, Hawaiian.
 Flags, Honduras.
 Flags, Japanese.
 Flags, jacks, American.
 Flags, Mexican.
 Flags, Nicaragua.
 Flags, pennants.
 Flags, P. M. S. S. Co.
 Flags, Salvador.
 Flags, U. S. M.
 Flags, signals, internatl.
 Fore, locks.
 Funnels.
 Glasses, night.
 Glasses, telescopes.
 Glasses, telescopes, second.
 Glasses, lantern (spare).
 Grummets.
 Hammers.
 Handcuffs, common.
 Handcuffs, patent.
 Handspikes.
 Hatches.
 Hatches, boat.
 Hooks, boat.
 Hooks, box.
 Hooks, chain.
 Hooks, curtain.
 Hooks, sister.
 Hooks and thimbles.
 Hoops, gaff.
 Hose, deck.
 Hose, fire.
 Hawasers, 6-inch.
 Hawasers, 7-inch.
 Hawasers, 8-inch.
 Hawasers, 9-inch.
 Hawasers, 10-inch.
 Hawasers, steel.
 Irons, leg.
 Lamps, signal.
 Lamps, bulkhead.
 Lanterns.
 Lanterns, cargo.
 Lanterns, dark.
 Leads, deep-sea.
 Leads, deep-sea (patent).
 Leads, hand.
 Life-preservers.
 Lights, anchor.
 Lights, masthead.
 Lights, side.
 Locks, pad, brass.
 Locks, pad, iron.
 Logs, patent.

Mats, brush, coir.
 Mats, dunnage.
 Magazines.
 Nozzles, hose, brass.
 Oars.
 Palms.
 Pins, belaying (spare).
 Pins, thole (spare).
 Pots, marking.
 Punch, chain.
 Rafts, life.
 Reels, log.
 Rope, sig.
 Rope, lines, deep-sea lead.
 Rope, hand.
 Rope, log.
 Sails, jib.
 Sails, fore.
 Sails, foretop.
 Sails, fore-topgallant.
 Sails, forestay.
 Sails, fore spencer.
 Sails, spankers.
 Sails, main.
 Sails, maintop.
 Sails, main topgallant.
 Sails, mizzen top.
 Sails, mizzen topgallant.
 Sails, main spencer.
 Sails, gaff top.
 Sails, boat.
 Sails, drag.
 Sails, wind.
 Scales, platform, large.
 Scales, spring.
 Scrapers.
 Screws, rigging.
 Screw-drivers.
 Shackles, anchor.
 Shackles, connecting.
 Sheaves, patent.
 Shovels.
 Slates, log.
 Slings.
 Slings, net.
 Spars, boat.
 Spikes, marline.
 Spittoons, rubber.
 Spittoons, wood.
 Staples, brass.
 Staples, iron.
 Stones, grind.
 Stones, hand.
 Stones, holy.
 Stones, tarpaulins.
 Thermometers.
 Thimbles, sail.
 Trucks, cargo.
 Washers, hose.
 Wrenches, hose.
 Wrenches, cargo ports.
 Wrenches, coal ports.
 Wrenches, air ports.
 Scrapers, file.
 Rottenstone.
 Palms, serving.
 Line, log.
 Rotator.

5. Equipment and spare machinery, engine department: All supplies and spare machinery for the use of the engine department as follows:

Anvils.	Nozzles, leather.
Augers.	Palms.
Axes, handled.	Planes, jack.
Bars, scaling.	Plugs, iron.
Barrows, coal.	Plugs, wood.
Baskets, coal.	Pliers.
Bellows.	Pots, salinometer.
Blocks.	Pumps, hydraulic.
Blocks, purchase.	Punches, hand.
Blocks, chain.	Punches, hydraulic.
Braces, breast.	Rams, battery.
Braces, bits, assorted.	Reamers.
Brushes, carbon (for dynamo).	Recompression.
Brushes, rope.	Reflectors.
Brushes, wire.	Rods for tubes.
Brushes, steel tube.	Saw, hack.
Buckets.	Saw, hack, blades.
Buckets, fire, galvanized iron.	Saw, hand.
Buckets, coal.	Scales, spring.
Cans, oil, quart.	Scales, beam.
Cans, jet.	Screw-drivers.
Calipers.	Screws, jack.
Chisels, bar.	Screws, lamp.
Chisels, carpenters'.	Screws, packing.
Chisels, cape.	Screws, lag.
Chisels, calking.	Shears, bench.
Chisels, flat.	Shears.
Chisels, flogging.	Shears, lamp.
Coal breakers.	Shovels, coal.
Coolers, water.	Slates, log.
Dies and stocks, assorted.	Sledges, iron.
Dies, gas-pipe.	Springs, piston.
Dividers.	Squares.
Drainers.	Stones, grind.
Drifts, assorted.	Scrapers, tube.
Drills, assorted.	Swages.
Drills, breast.	Syringes, oil.
Expanders, tube.	Tanks.
Forges.	Tanks, tallow.
Funnels.	Tanks, waste.
Glass water gauge.	Taps, assorted.
Grummets, rubber.	Thermometers.
Hammers, carpenters'.	Tongs, blacksmith.
Hammers, chipping.	Tongs, pipe.
Hammers, coal.	Tools, fire, bars, sinking.
Hammers, riveting.	Tools, fire, bars, slice.
Hammers, scaling.	Tools, fire, claws, clinker.
Hatchets.	Tools, fire, hoes.
Hooks, packing.	Trowels.
Hose, fire.	Tubs, ash.
Hose, garden.	Tubs, coal.
Hose, steam.	Vises, bench.
Hose spanners.	Vises, hand.
Indicators, H. P., I. P., and L. P.	Vises, pipe.
Iron, soldering.	Wedges, iron.
Laffles.	Wedges, steel.
Lamps, bumper.	Wrenches, assorted.
Lamps, tin, hand.	Wrenches, hose.
Lamps, bulkhead.	Wrenches, key.
Lanterns.	Wrenches, monkey.
Locks, pad.	Wrenches, pawl.
Mallets.	Wrenches, socket.
Measures.	Wrenches, tap.
Nozzles, brass.	

6. Equipment, commissary department: All material and supplies for the use of the commissary department as follows:

Annunciator and fixtures.	Cans, silver.
Axes.	Cans, toilet.
Axes, ice.	Casters, silver plated.
Baskets, cake, silver-plated.	Casters, silver plated, pickle.
Baskets, glass.	Casters, mess room.
Baskets, knife.	Cellers, salt.
Baskets, market.	Chairs, carpet seats, S. R.
Baskets, plate.	Chairs, cane seats, walnut.
Baskets, rice.	Chairs, cane seats, oak.
Baskets, wine.	Chairs, perforated seats.
Basins, berth.	Chairs, upholstered seats, walnut.
Basins, porcelain.	Chairs, upholstered seats, arm.
Basins, stationary.	Chairs, revolving.
Basins, tin.	Chairs, Spanish.
Bells, silver-plated.	Chambers.
Bells, steerage.	Chessmen.
Benches, butcher shops.	Checkers.
Blocks, chopping.	Cups, dice.
Blocks, soap.	Cleavers.
Boards, chess.	Clocks.
Boards, chopping.	Coolers, water, mess room.
Boards, cutting.	Coolers, water, saloon.
Boats, sauce, china.	Coolers, water, steerage.
Bibles.	Covers, barrel.
Boats, sauce, silver plated.	Cruets, spare.
Books, hymn.	Cullenders.
Books, library.	Cups and saucers.
Books, music.	Cups, A. D. and saucers.
Books, prayer.	Cutters, paste.
Boilers, copper, large.	Covers, apple.
Boilers, copper, small.	Decanters.
Boilers, copper, coffee.	Dishes, chicken.
Boilers, copper, water.	Dishes, chafing.
Boilers, rice.	Dishes, covered, silver.
Bottles, water, glass.	Dishes, plated, entree.
Bottles, water, porcelain.	Dishes, covered, silver.
Bottles, water, copper.	Dishes, plated, vegetable.
Boxes, cleaning.	Dishes, individual, silver.
Boxes, pepper, small.	Dishes, plated, flat.
Boxes, pepper, large.	Dishes, plated, deep.
Boxes, salt.	Dishes, individual, china.
Boxes, spice.	Dishes, flat.
Boxes, sardine, silver plated.	Dishes, deep.
Bowls, butter, silver plated.	Dishes, deep, vegetable.
Bowls, mess-room.	Dishes, flat, assorted.
Bowls, butter, china.	Dishes, 9 to 16 inch.
Bowls, egg, copper.	Dishes, joint, 18 to 24 inch.
Bowls, finger.	Dishes, pickle.
Bowls, glass.	Dishes, preserve, glass.
Bowls, gruel.	Dishes, fruit stand, china.
Bowls, ice.	Dishes, fruit shells.
Bowls salad.	Dishes, agate, bakers'.
Bowls, rice.	Dippers, tin.
Bowls, sugar, silver plated.	Dice.
Bowls, sugar, china.	Dominoes.
Bowls, wood.	Dredgers.
Broilers, large, stationary.	Filters.
Buckets, coal.	Funnels, tin.
Caddies, tea.	Faucets, brass.
Candlesticks, silver plated.	Faucets, wood.
Candlesticks, japanned.	Feeders, oil.
Checks, Chinese.	Forks, flesh, large.
Chests, ice.	Forks, silver plated table.
Cans, mess.	Forks, silver plated dessert.
Cans, water, officers'.	Forks, silver plated mess room.

Forks, steerage.
 Freezers, ice cream.
 Gates, molasses (spare).
 Glasses, champagne.
 Glasses, claret.
 Glasses, celery.
 Glasses, egg.
 Glasses, Hock, colored.
 Glasses, tumblers.
 Glasses, sherry.
 Glasses, soda water.
 Glasses, liqueur.
 Globes, combination.
 Gongs.
 Graters, cheese.
 Graters, nutmeg.
 Griddles, bakers.
 Gridirons.
 Hammers, tack.
 Hammers, claw.
 Hassocks.
 Hatchets.
 Hoes, stable.
 Hooks, meat.
 Irons, smoothing.
 Irons, waffle.
 Kettles, fish.
 Kettles, scouse.
 Kettles, stock, copper.
 Kettles, hot water.
 Keys, port.
 Knives, butter.
 Knives, carvers.
 Knives and forks.
 Knives, chopping.
 Knives, cleaver.
 Knives, cooks'.
 Knives, fish, silver plated.
 Knives, mincing.
 Knives, steerage.
 Knives, dessert, steel.
 Knives, dessert, silver plated.
 Knives, table.
 Knives, table, steel.
 Knives, table, mess room.
 Ladles, butter, wood.
 Ladles, Chinese, wood.
 Ladles, galley, iron.
 Ladles, gravy, silver plated.
 Ladles, soup.
 Ladles, soup, mess room.
 Ladles, steerage.
 Lamps, stateroom.
 Lamps, saloon.
 Lamps, officers' room.
 Lamps, bulkhead.
 Lanterns, brass egg.
 Lanterns, tin.
 Lanterns, dark.
 Lanterns, signal.
 Lighters, cigar, brass.
 Lighters, cigar, silver plated.
 Lighters, lamp.
 Lifters, stove lid.
 Locks, pad, brass.
 Locks, small, lamp.
 Locks, jail.
 Locks, Yale.
 Machines, sausage.
 Mallets, wood.
 Measures, tin.
 Measures, copper.
 Mills, coffee.
 Mirrors, saloon.
 Mirrors, stateroom.
 Mirrors, officers' room.
 Mortars and pestles.
 Molds, jelly.
 Molds, melon.
 Molds, ice cream.
 Molds, raised pie.
 Mugs, coffee.
 Needles, larding.
 Nutcrackers, silver plated.
 Openers, box.
 Openers, champagne.
 Openers, sardine.
 Pans, bakers', Russia iron.
 Pans, corn bread.
 Pans, cake, jelly.
 Pans, cake, sponge.
 Pans, Charlotte Russe.
 Pans, dust.
 Pans, dripping.
 Pans, frying, copper.
 Pans, frying, iron.
 Pans, meat, large.
 Pans, mess, large.
 Pans, mess, medium.
 Pans, mess, Chinese sauce.
 Pans, omelette.
 Pans, pate.
 Pans, sauce, copper.
 Pans, sauce, French.
 Pans, sauce, iron.
 Pans, sauce, soup.
 Pails, chamber, covered.
 Pails, milk.
 Pails, scrub, iron.
 Pails, scrub, wood.
 Pails, slop, stateroom.
 Pails, water, tin, large.
 Piano.
 Picks, ice.
 Pins, rolling.
 Pitchers, ice, silver plated.
 Pitchers, milk, silver plated.
 Pitchers, milk, mess room.
 Pitchers, milk, china.
 Pitchers, sirup, silver-plated.
 Pitchers, sirup, messroom.
 Pitchers, water, silver-plated.
 Pitchers, water, china.
 Plates, breakfast.
 Plates, butter.
 Plates, dinner.
 Plates, dessert.
 Plates, fruit.
 Plates, pie, tin.
 Plates, preserve.
 Plates, soup.
 Plates, steerage.
 Pots, coffee and Biggins.
 Pots, tin.

Pots, coffee, silver plated.	Strainers, jelly.
Pots, coffee, large.	Straps, leather.
Pots, coffee, small.	Syringes.
Pots, tea, silver plated, large.	Stretchers.
Pots, tea, silver plated, small.	Standees.
Pots, tea, tin, large.	Shears, lamp.
Pots, tea, tin, small.	Stencils, plates.
Pots, molasses, tin.	Tables, card.
Pots, marking.	Tables, dining.
Pots, vinegar.	Tables, marble top.
Pokers.	Tables, side.
Pounders, potato.	Tables, toilet.
Pumps.	Tables, steam, pantry.
Portfolios.	Tables, steam, mess room.
Rings, muffin.	Tanks, oil.
Rings, napkin, silver plated.	Tanks, waste.
Racks, book, stateroom.	Tongs, ice.
Racks, berth, stateroom.	Tongs, pickle.
Racks, table.	Tongs, sugar.
Racks, toast.	Tormentors.
Racks, wineglass.	Trays, crumb.
Safes, match.	Trays, japanned, large.
Scales, counter.	Trays, japanned, small.
Scales, spring.	Trays, lamp.
Steelyards.	Trays, mincing.
Scoops, iron, rice.	Trays, silver plated.
Scoops, tin.	Trays, toothbrush.
Scoops, cheese, silver plated.	Tubs, bath, stationary.
Scrapers, dough.	Tubs, bath, foot.
Screws, cork.	Tubs, ice.
Shades, comb, lamp.	Tureens, soup, silver plated.
Shades, comb, decorated.	Tureens, soup, mess room.
Shovels, fire.	Urns, coffee.
Shovels, rice.	Urns, tea.
Shovels, stable.	Urns, hot water.
Sieves, flour.	Wire, whips, eggs.
Sieves, sugar.	Bags, clothes.
Skewers.	Blankets, white.
Skimmers, iron.	Blankets, gray.
Slicers, egg.	Blankets, ice.
Slicers, beef, and forks.	Carpets, saloon.
Sofas, movable.	Carpets, officers' rooms.
Spoons, basting, iron.	Carpets, staterooms.
Spoons, dessert, silver plated.	Cloths, table, white.
Spoons, mustard.	Cloths, table, mess room.
Spoons, salt, silver plated.	Covers, cushion seats, backs.
Spoons, sugar, silver plated.	Covers, mattress.
Spoons, steerage, iron.	Covers, pillow.
Spoons, table, silver plated.	Covers, piano.
Spoons, table, mess room.	Covers, table.
Spoons, tea, silver plated, mess room.	Covers, table, port.
Spoons, wooden.	Covers, table, sea.
Spittoons, silver plated.	Covers, table, small.
Spittoons, china.	Counterpanes, white, pink.
Spittoons, rubber.	Counterpanes, brown, blue.
Steamers, galvanized.	Curtain loops.
Steamers, tin.	Curtain dimity.
Steels.	Curtain lace.
Sticks, chop.	Curtain chenille.
Stools, cane seat.	Curtain damask.
Stools, perforated seat.	Cushions, saloon, plush.
Stools, piano.	Cushions, plush, chair.
Stools, upholstered.	Cushions, plush, backs.
Stoves, after kitchen.	Cushions, stateroom, plush.
Stoves, steerage.	Cushions, stateroom, plush backs.
Stoves, baker.	Cushions, stateroom, leather.
Strainers, gravy.	Cushions, stateroom, leather backs.

Cushions, smoking room, leather.
 Cushions, smoking room, leather backs.
 Cushions, chair, leather.
 Curtain rods.
 Mats, brush.
 Mats, cork.
 Mats, rubber.
 Mats, velvet.
 Mats, wood bordered.
 Matting, cocoa.
 Mattresses, hair, double.
 Mattresses, hair, single.
 Mattresses, hair, sofa.
 Mattresses, spring.
 Mattresses, wire.
 Mattresses, steerage.
 Napkins.
 Pillows, feather.
 Pillows, hair.

Pillows, leather.
 Pillows, plush.
 Pillows, steerage.
 Pockets, stateroom.
 Rugs, Smyrna, large.
 Rugs, Smyrna, small.
 Rugs, velvet.
 Runners, carpet.
 Sacking, bottoms.
 Sheets, linen, double.
 Sheets, linen, single.
 Slips, linen.
 Sleeves, linen.
 Tidies.
 Towels, bath.
 Towels, pantry.
 Towels, roller.
 Towels, stateroom.
 Towels, glass.

7. Fuel: Cost of coal, including storing in yard, and wood for kindling.

8. Feeding passengers and crew: Provisions and supplies of every character required for feeding passengers and crew. Includes wines and liquors for cooking purposes.

9. Incidentals: All expenses not included under any other regular heading under steamer expenses.

10. Injuries to persons: Payments for injuries to individuals, board, nursing, medical attendance, and other expenses arising from said injuries incurred on board ship or at ship's tackles.

Legal expenses in connection with the above should be charged to "Agency expenses," account No. 59.

11. Labor on cargo: Labor loading, unloading, and transferring cargo, reassure, mails, baggage, and stores.

12. Labor on coal: All labor attendant upon delivering fuel coal to steamers.

13. Labor on ashes: Labor removing ashes and banana refuse.

14. Loss and damage: Payments for lost or damaged baggage, cargo, treasure, or other property lost or damaged on board ship, or at ship's tackle, and material used in making repairs.

Legal expenses in connection with the above should be charged to "Agency expenses," account No. 59.

15. Oil and waste: Oils (except such as are used for illuminating and mixing paints), waste, tallow, and rags, used in all departments for lubricating.

16. Painting ship's bottom: Labor and material used in painting ship's bottom.

17. Pilotage and towage: Payments for pilotage to and from sea, towing to and from dry dock, etc., wherever tugs are used. Includes also payments to boatmen hauling lines while docking and undocking.

18. Quarantine: Payments of dues to officials, physician's fees, and all other expenses incurred by quarantine of steamers.

19. Repair, deck department: All labor and materials required for the ordinary maintenance of and repairs to hull, deck houses, running and standing rigging, boats and their outfits, sails, awnings, anchors, chains, and all other articles and mechanical appliances provided for use of and in charge of the deck department.

All contract painting except as provided for by accounts Nos. 16, 20, and 21.

Repairs and renewals of furniture and fixtures except as provided for by account No. 21.

20. Repairs, engine department: All labor and material required for the ordinary maintenance of and repairs to all the boilers and machinery in the ship in charge of the chief engineer, coal bunkers, coal-bunker bulkheads, shaft alley, propellor, engine-room floors and frames.

21. Repairs, commissary department: All labor and material required for the ordinary maintenance of and repairs to saloon, passenger staterooms, issuing rooms, pantry, kitchen, and range.

Renewals and repairs to saloon and passenger staterooms, furniture and fittings, piano, carpets, mattresses, pillows, pantry utensils, kitchen utensils, and range.

All contract painting in saloon, passenger staterooms, issuing room, pantry, and kitchen.

22. Stores, deck department: All material and supplies furnished for the use of the deck department as enumerated below:

Ammunition, cartridges, pistol.	Paint, dryer, patent.
Ammunition, cartridges, rifle.	Paint, lampblack.
Ammonia.	Paint, lead, black.
Brick, bath.	Paint, lead, red.
Beeswax.	Paint, lead, white.
Brooms, bamboo.	Paint, ochre, yellow, dry.
Brooms, corn.	Paint, ochre, in oil.
Brushes, deck, coir.	Paint, fireproof, metallic.
Brushes, marking.	Paint, zinc, white.
Brushes, paint.	Paint, plumbago.
Brushes, paste.	Paint, umber, burnt.
Brushes, sash.	Paper, sand.
Brushes, scrub.	Pins, escutcheon.
Brushes, stencil.	Putty.
Brushes, varnish.	Potash.
Brushes, whitewash.	Polishing paste.
Bunting, assorted colors.	Rags.
Buttons, brass.	Rockets.
Butts, brass.	Rope, hazabroline.
Canvas, cotton.	Rope, hemp.
Canvas, hemp.	Rope, houseline.
Chalk.	Rope, manila, 2 inch.
Cloth, emery.	Rope, manila, 2½-inch.
Eyes, screw.	Rope, manila, 3-inch.
Globes, cargo lanterns.	Rope, manila, 3½-inch.
Glue.	Rope, manila, 4-inch.
Halyards, signal.	Rope, manila, 4½-inch.
Handles, axe.	Rope, manila, 5-inch.
Handles, mop.	Rope, marline.
Hooks, cabin door.	Rope, ratline.
Hoops, cup.	Rope, spun yarn.
Junk.	Rope, seizing.
Knobs, door.	Sand.
Lead, sheet.	Screws, brass.
Leather, rigging.	Screws, iron.
Lights, blue.	Soap, brown.
Line.	Soap, salt water.
Lime, chloride.	Soap, soft.
Lighterage.	Soda, sal.
Lumber, ash.	Sponge.
Lumber, pine, Oregon.	Signals, coston.
Lumber, pine, sugar.	Squillees.
Lumber, dunnage.	Oil, lard.
Lumber, redwood.	Scrubbers, deck.
Metal, yellow.	Signals, blue.
Mops.	Signals, red.
Mops, cotton.	Tacks, galvanized.
Nails, brad.	Tacks.
Nails, cut.	Tar, Stockolm.
Nails, finishing.	Thread, assorted.
Nails, galvanized.	Turpentine.
Needles, sail.	Twine, cotton.
Needles, bag.	Twine, hemp.
Needles, roping.	Varnish, bright.
Oakum.	Varnish, copal.
Oil, boiled.	Varnish, damar.
Oil, raw.	Varnish, E. oak.
Oil, tar.	Varnish, Japan.
Oil, wood.	Varnish, shellac.
Paint, black.	Varnish, spar.
Paint, blue, Prussian.	Wire, copper.
Paint, yellow chrome.	Wire, iron.

23. Stores, engine department: All material and supplies furnished for the use of the engine department, as enumerated below:

Beeswax.	Metal, yellow.
Bolts, copper.	Metal, antifriction.
Bolts, eye.	Metal, muntz.
Bolts, follower.	Nails, assorted.
Bolts, furnace door.	Needles, sail.
Bolts, joint, assorted.	Nuts, assorted.
Bolts, socket.	Oil, boiled.
Bolts, stud.	Oil, lamp.
Borax.	Oil, lubricating.
Brick, bath.	Oil, mineral, sperm.
Brick, fire.	Packing, asbestos.
Brick, red.	Packing, cotton.
Brooms, corn.	Packing, hemp.
Brooms, bamboo.	Packing, peerless.
Brushes.	Packing, rubber.
Brushes, sash.	Packing, tucks.
Brushes, scrub.	Paint, black.
Brushes, whitewash.	Paint, fireproof, metallic.
Brushes, tube.	Pencils, slate.
Brushes, paint.	Plumbago.
Canvas.	Potash.
Cards, indicator.	Polishing paste.
Cement.	Rags, wiping.
Chalk.	Rivets, assorted.
Chimneys, lamp.	Rope, manila.
Cloth, emery.	Rubber, joint.
Clay, fire.	Rubber, pure.
Copper.	Rubber, usudurian.
Cocks, bib.	Salamoniac.
Dryers, patent.	Salinometers.
Files, assorted.	Soda, sal.
Gaskets, manhole.	Soap, brown.
Gaskets, handhole.	Soap, salt water.
Glass, ground.	Solder.
Glasses, lantern.	Turpentine.
Handles, file.	Twine, cotton.
Handles, hammer.	Umber, burnt.
Handles, sledge.	Varnish.
Iron, boiler.	Valves, cicc, pump.
Iron, bar.	Valves, air pump.
Iron, sheet.	Washers, iron, assorted.
Lead, black, dry.	Wick, ball.
Lead, red.	Wick, flat.
Lead, sheet.	Wire, copper.
Lead, white.	Wire, lead.
Lime.	Wood.
Lime, chloride.	Wool, coarse, yarn.
Lye, concentrated.	Zinc, white.
Mats, door.	Sash, tools.
Marline.	Waste, cotton.

24. Stores, commissary department: All material and supplies furnished for the use of the commissary department, as follows:

Alcohol.	Brushes, silver.
Aqua ammonia.	Brushes, whitewash.
Bath brick.	Burners, A.
Brooms, corn.	Burners, B.
Brooms, whisk.	Burners, E.
Brushes, bath.	Candles.
Brushes, bamboo.	Charcoal.
Brushes, crumb.	Chicken feed.
Brushes, dust, feather.	Chimneys, A.
Brushes, hair.	Chimneys, B.
Brushes, scrub.	Chimneys, E.

Cloth, emery.
 Flannel, white.
 Flannel, canton.
 Glasses, binnacle.
 Glasses, bulkhead, lamp.
 Globes, lantern.
 Hooks, clothes.
 Hooks, cup.
 Hay.
 Lime, chloride.
 Knots, couch.
 Matches.
 Mops, cotton.
 Mops, handles.
 Muslin, brown.
 Oil, lard.
 Oil, mineral, sperm.
 Paper, toilet.
 Paper, bedbug.
 Polishing paste.
 Potash.
 Powder, insect.
 Rags.

Rings, curtain.
 Rottenstones.
 Silicon.
 Sal soda.
 Sapolio.
 Skins, charmois.
 Soap, brown.
 Soap, castile.
 Soap, salt water.
 Soap, Bombay.
 Soap, toilet.
 Sponge.
 Tape.
 Tacks.
 Thread.
 Toothpicks.
 Twine, cotton.
 Turpentine.
 Whiting.
 Wick, bail.
 Wick, A.
 Wick, B.
 Wick, E.

25. Stores, surgeon's department: Medicines, drugs, vaccine, etc., used by ship surgeon.
 26. Stationery and printing: Blanks, books, papers, pencils, pens, envelopes, copy presses, inkstands, and ink, rubber stamps, hektographs and filling same, and other office appointments and stationery of all kinds used exclusively by steamers.
 27. Telegrams and cables: All disbursements for this account on steamer's movements and business.
 28. Wages: Voyage and port pay of officers and crew. Premium on guaranty insurance of officers.
 29. Wages, special: Wages of spare captains, of captains and other officers detached, or on leave of absence under pay, and wages of officers and crew, after discharge from a ship and while returning to original port of shipment under pay, for final discharge.
 30. Water: Payments for water furnished steamers at all points.
 31. Washing: Payments for washing ship's linen, etc.
 32. Wines and liquors: Wines, liquors, and mineral waters placed on board steamers for sale. Wines and liquors for cooking purposes are a charge to account No. 8.

AGENCY EXPENSES.

50. Advertising, newspapers: Advertising time tables and all other notices of arrival and departure of steamers by the several agencies in newspapers.
 51. Buildings, docks and wharves, repairs and rent of: Repairs and maintenance of all agency offices, buildings, docks, and wharves; rentals, paid for use of buildings, docks, wharves and land. Cost of filling and dredging.
 52. Buildings, docks and wharves, other expenses: Office furniture and fixtures for agency offices, buildings, docks, and wharves, and repairs to same, subscription to newspapers and other publications, telephone and messenger service, heating, lighting, washing, water, ice, postage stamps and postal cards, and other supplies, except such as are charged to account No. 57.
 53. Commissions, passengers: Commissions paid to agents not in the regular employ of the company, and to foreign steamship companies on passengers secured by them.
 54. Commissions, freight: Commissions and brokerage paid to agents not in the regular employ of the company, on freight secured by them.
 55. Insurance: Fire insurance on buildings and other property.
 56. Injuries to persons: Payments for injuries to individuals, board, nursing, medical attendance and other expenses arising from said injuries incurred at agencies. Legal expenses in connection with the above should be charged to account No. 59.
 57. Incidentals: All expenses not covered by any other regular heading under agency expenses.
 58. Labor, general: To this account should be charged the wages of watchmen, gate keepers, porters, messengers, and all other employees of the agency, except the salaries of agents and clerks, and such labor as is a direct charge to the item under "Steamer expenses."
 59. Legal services and expenses: Payment for legal services, witness and court fees, traveling and other expenses in connection with suits of every character.

60. Loss and damage: Payments for lost or damaged baggage, cargo, treasure, or other property lost or damaged at agencies. Legal expenses in connection with the above should be charged to account No. 59.

61. Salaries, agents, and clerks: Salaries or commissions to agents (except as provided by accounts Nos. 53 and 54). Salaries of clerks and premiums on guaranty insurance.

62. Stationery and printing: Blanks, books, papers, pencils, pens, envelopes, inkstands and ink, rubber stamps, hektographs and filling for same, and all stationery used exclusively on agency business, printing tariffs, tickets, itineraries, and all printing for agency use, except as provided for by account No. 50.

63. Telegrams and cables: All disbursements for this account on business for the agency.

64. Taxes: Taxes paid of all kinds.

GENERAL EXPENSES.

80. Advertising, folders, and posters: Cost of folders, posters, and expense of distributing advertising matter. Advertising in periodicals, magazines, and other publications other than newspapers.

81. Advertising, general: Advertising meeting of directors, dividends, and all other advertising except such as has been charged to accounts Nos. 50 and 80.

82. Clerks, salaries of: Salaries of clerks and messengers employed in the general offices in New York.

83. Directors' and committees' fees: Fees paid directors attending meetings of board, executive and finance committee, and committee on securities.

84. General offices, repairs and rent of: Repairs of buildings and appurtenances and rent paid for same.

85. General offices, other expenses: Office furniture, fixtures and repairs to same, telephone and messenger service, compensation for transfer and registry of company's stock, subscription to newspapers and other publications, expressage, heating, lighting, water, ice, washing, postage stamps and postal cards, and other incidental expenses incurred in the general office in New York, salaries of porters and janitors employed in the general offices.

86. Incidentals: All other expenses not covered by any other regular heading under General Expenses.

87. Legal services and expenses: Salaries and expenses of counsel in New York, witness and court fees, traveling expenses, printing briefs, and all other legal expenses in New York and Bogota, conducting suits appertaining to the general affairs of the company.

88. Officers, salaries of: Salaries and expenses of general officers in New York, guaranty insurance of officers.

89. Stationery and printing: Blanks, books, paper, pencils, envelopes, inkstands and ink, paper baskets, wrapping paper, twine, rubber stamps, rulers, shears, sealing wax, and all stationery used in the general office in New York. This account includes annual and other reports and stock certificates.

90. Telegrams and cables: All disbursements for telegrams and cables sent by the general office in New York.

GENERAL EXPENSES—ISTHIMUS.

101. Advertising: This account includes the cost of all advertising except as specified elsewhere.

102. Clerks and attendants, salaries of: This account includes salaries of clerks, attendants, and other employees in the offices of superintendent, local auditor, and cashier.

103. Cablegrams: This account includes cost of all cablegrams, except those relating to movements and business of steamers.

104. Hospital service: This account includes salaries of surgeons at Panama and Colon, wages of nurses and servants, washing, maintenance of beds and bedding, medicines, druggists' sundries, and other supplies used in the treatment of sick and injured.

105. Incidentals: This account includes such expenditures as are not properly chargeable to any other account in this section.

106. Legal expenses: This account includes salaries and expenses of attorneys, printing briefs, legal forms, testimony, etc., costs of suits, special fees, notarial fees, expenses connected with taking depositions, and all legal and court expenses of every kind not otherwise provided for herein.

107. Miscellaneous: This account includes salary of caterer at Washington mess, contributions to Washington reading room and foreign cemetery, allowance to schoolmaster at Colon, etc.

108. Officers, salaries of: This account includes salary of superintendent, local auditor, and cashier, guaranty insurance of officers.

109. Office expenses and supplies: This account includes all expenditures for lighting offices, expenses of officers, clerks and attendants, supplies for offices, including expenses

and supplies of pay car and special car while in use by the superintendent, postage and rent of post-office box, subscription to Star and Herald.

110. Stationery and printing: This account includes cost of all blank forms, books, leases, paper, stationery, stationery supplies, etc., not chargeable to this heading under other accounts.

CONDUCTING TRANSPORTATION.

115. Advertising: This account includes cost of printing and publishing passenger timetables for general distribution, printing of advertising matter, advertising in newspapers, bulletin boards, cards, frames, glasses, hand bills, postage and express charges on above matter.

116. Clearing wrecks: This account includes all expenditures of labor and material for clearing wrecks, cost of labor and material required to replace wrecked equipment upon the track, and expenses of wrecking trains and wrecking tools used in connection therewith, building temporary track around wreck, reloading or transferring passengers, baggage, freight, mails, etc.; provisions, board, etc., for men clearing up or watching at wrecks, meals or board for passengers delayed on account of wrecks.

117. Engineers and firemen: This account includes wages of all engineers and firemen while engaged in running locomotives (except while on work-train service).

118. Fuel for locomotives: This account includes the cost of fuel consumed by locomotives engaged in traffic and switching service, including freight charges and cost of handling; also tools used in handling.

119. Freight agents and clerks, Colon:

120. Freight agents and clerks, Panama and La Boca: These accounts include the salaries of freight agents, wharf superintendents, office clerks, check clerks, messengers, etc.

121. Injuries to persons: This account includes all payments on account of passengers, employees, or other persons killed or injured, gratuities and compensation paid to injured or disabled persons, their guardians, heirs, relatives, and attorneys, fees, and expenses of doctors, undertakers, witnesses, and others (except lawyers' fees and court expenses), nursing and hospital attendance, medical and surgical supplies, funeral expenses, and all similar expenses in connection with injury cases, wages and expenses of employees engaged as witnesses in case of suits.

122. Incidentals: This account includes all expenditures in connection with conducting transportation which can not be classified under other headings in this section.

123. Labor, Colon station:

124. Labor, Panama station and La Boca pier: These accounts include wages of foremen, freight callers, paint boys, car sealers, number takers, sling men, truckmen, and other laborers, messengers, coopers, engine men for stationary engines while handling cargo, wages of employees while engaged in weighing and carrying mails.

125. Oil, tallow, and waste: This account includes the cost of oil, tallow, waste, wool, grease, rags, etc., used in lighting, cleaning, and lubricating locomotives engaged in traffic and switching service.

126. Other supplies for locomotives: This account includes miscellaneous supplies (other than furniture) required to fully equip locomotives engaged in traffic and switching service, such as—

Axes.	Jacks.	Scoops.
Brooms.	Lanterns.	Switch chains.
Brushes.	Lampblack.	Switch ropes.
Chisels.	Links and pins.	Switch keys.
Crowbars.	Matches.	Soap.
Files.	Oil cans.	Shunting poles.
Flags.	Picks.	Torpedoes.
Flag boxes.	Polish.	Tallow buckets.
Frogs.	Packing.	Water buckets, etc.
Globes.	Sand.	
Hatchets.	Shovels.	

127. Roundhouse men: This account includes wages of hostlers, watchmen, and employees engaged in wiping, cleaning, firing up, dumping, washing boilers, cleaning fire boxes, roundhouse cleaners, ash-pit cleaners, sand dryers, operators of turntables, etc.

128. Superintendence and clerks: This account includes salary and expenses of assistant superintendent and master of trains, and clerks; also incidental expenses of their offices.

129. Switchmen, yardmen, and yard watchmen: This account includes the wages of yardmasters and their clerks, yard foremen, yard trainmen, yard switchmen, switch tenders, yard watchmen, and crossing flagmen.

130. Station agents, clerks, etc.: This account includes salaries of station and ticket agents, clerks, baggagemen and gatemen at all stations, wages of men attending electric light, cleaning, filling and lighting switch lamps, and other like expenses.

131. Station supplies and expenses: This account includes all expenditures (except for labor) for lighting depots, waiting rooms, freight and passenger offices, and other station buildings, freight yards, wharves, etc.; supplies for station and yard signals and switches, supplies and implements for handling freight and baggage, locks, seals and wires, baggage checks, etc.; payments for ice, water, etc.; premiums on bonds of agents and other station employees.

132. Stationery: This account includes all expenditures for stationery and stationery supplies, printing, including books, blank forms, employees' time-tables, tariffs, tickets, way-bills and abstracts, and similar items used in connection with conducting transportation.

133. Train conductors, baggagemen, flagmen, and brakemen: This account includes wages of conductors, baggagemen, flagmen, and brakemen on freight and passenger trains.

134. Train supplies and expenses: This account includes all expenditure of labor and material for lighting cars, including cost of oil, wick, etc., for trainmen's lanterns, ice for coaches, wages and supplies for cleaning cars, links and pins, car stakes, cleats, and dunnage, labor and material used in lubricating cars, torpedoes, signal flags, and trainmen's lanterns.

135. Telegraph expenses: This account includes all expenditure of labor and material for operation of telegraph and telephone lines, salaries of train dispatchers and their clerks, telegraph operators and messengers, chemicals, copper, zincs, and other supplies for batteries, light, and other expenses for telegraph offices.

136. Water supply for locomotives: This account includes the cost of water furnished locomotives engaged in traffic and switching service, including all expenses of operating water stations and pumping plants.

NOTE.—When water is used for other branches of the service or sold to outside parties a proportion of the expenses should be transferred at the end of the month to the proper account.

137. Rent of buildings and other property: This account includes all payments for rent of buildings and other property used in connection with the operations of the road, including rent of La Boca branch.

MAINTENANCE OF EQUIPMENT.

150. Freight cars, repairs and renewals of: This account includes all expenditures of labor and material for repairs and renewals of freight cars of all classes, including fittings and furniture, wages of car inspectors and cost of tools used in inspecting and lubricating freight cars, tools used by car repairers for making light repairs, etc. Freight cars may be classified as follows:

Box.	Coal.	Stock.
Caboose.	Platform.	Tank.

151. Incidentals: This account includes all expenditures for "maintenance of equipment" which can not be properly classified under any of the other headings, except small hand tools used by mechanics and soon worn out, and wages of persons in charge of same, which should be charged to the account mostly benefited by their use, wages of engineers and firemen for stationary engines, sweepers, cleaners, roustabouts and other unskilled laborers employed on general work in and about the shops, fuel for stationary boilers, forges, and other analogous items, which should be apportioned between the different "maintenance of equipment" accounts on basis of relative amount of work done for the account of each.

152. Locomotives, repairs and renewals of: This account includes all expenditures of labor and material for repairs and renewals of locomotives, tenders, and furniture, loose and movable tools and supplies used in connection therewith.

153. Passenger cars, repairs and renewals of: This account includes all expenditures of labor and material for repairs and renewals of passenger cars of all classes, including fittings and furniture, wages of car inspectors and cost of tools used in inspecting and lubricating passenger cars, tools used by car repairers for making light repairs, etc. Passenger cars may be classified as follows:

Baggage.	Passenger, all classes.	Special.
Express.	Pay.	

154. Superintendence and clerks: This account includes the salaries and expenses of master mechanic, foremen of car shops, their clerks and attendants.

155. Stationery and printing: This account includes all expenditures for stationery, stationery supplies and printing, including books, blank forms, etc., used in connection with maintenance of equipment.

156. Shop expenses: This account includes all expenditures for lighting shops, sheds, and offices, wages of watchmen engaged in watching shops, sheds, and offices and shop sweepers.

157. Shop machinery and tools, repairs and renewals of: This account includes all expenditures of labor and material, repairs, and maintenance of boilers, stationary engines, scaffolds, shafting, belting, and other appliances for running machinery, furnaces, forges, and all machinery in car and locomotive shops and all tools and fixtures used in connection therewith, and oil, tallow, and waste used in lubricating and cleaning tools and machinery in shops.

158. Work cars, repairs and renewals of: This account includes all expenditures of labor and material for repairs and renewals of work or service cars, including fittings and furniture, repairs of commercial cars when assigned to work service, including cost of charges to fit them for such service and expense of refitting them for commercial service. Work and service cars may be classified as follows:

Derrick.	Hand.	Push
Gravel.	Pile driver.	Wrecking.
Grass burned car.		

MAINTENANCE OF WAY AND STRUCTURES.

170. Bridges and culverts, repairs and renewals of: This account includes all expenditures of labor and material for repairs and renewals of bridges, trestles, and culverts, both substructure and superstructure, and comprises the following:

Wages of bridge foremen and bridge watchmen, expenses of locomotives, work trains and pile driver engaged in this service, piers, abutments, retaining walls, drain pipes, riprap, dikes, etc., to protect bridges and culverts, removing old bridges and erecting and removing temporary false work.

171. General offices, repairs and renewals of: This account includes all expenditures for repairs of general offices, including furniture and fixtures, such as—

Awnings.	Ice boxes.	Pigeonhole cases.
Chairs.	Looking glasses.	Racks.
Clocks.	Mats.	Safes.
Counters.	Matting.	Shelving.
Desks.	Office railings.	Tables, etc.

172. Incidentals: This account includes all expenditures in connection with maintenance of way and structures which can not be classified under other headings in this section.

173. Machinery and tools, repairs and renewals of: This account includes the cost of repairs and renewals of tools used in maintenance of way service not elsewhere provided for, axes, brooms, lanterns, and lantern fittings, picks, shovels, tamping bars, etc.; proportion of renewals and repairs of pile driver.

174. Rails, renewals of: This account includes the cost of rails laid on main tracks or sidings in depots, yards, or buildings, on turntables, wharves, track scale, bridges, trestles, and culverts, also cost of inspection and transportation. Guard rails should be charged to this account.

175. Roadway and track, repairs of: This account includes cost of all labor and material expended in connection with repairs of roadway and track (except items included under other headings in this section), including wages of section foremen, track laborers, track watchmen, gravel pitmen, crews of work trains and employees operating pile driver, labor and material expended in sloping cuts, blasting and widening embankments, preparing, delivering, and spreading ballast, building retaining walls, dikes, and breakwaters to protect tracks, labor loading, distributing, laying and gathering up rails, ties, and other track material, cutting, slotting or drilling rails; labor and material expended in filling trestles with earth; fuel, water, oil, waste, and other supplies used on work train, engines, and cars and in section houses and tool houses.

176. Road crossings, signs and cattle guards, repairs and renewals of: This account includes all expenditures of labor and material for street crossings, overhead bridges, whistle and mile posts, cattle guards, and tools used for making such repairs.

177. Superintendence and clerks: This account includes the salaries and expenses of road master, section masters, clerks, draughtsmen, etc., in office of road master.

178. Switches and frogs, renewals of: This account includes the cost of switches, switch rails, switch stands, switch lamps, and other material for switches; cost of new frogs and repairs to old frogs, and freight on same; rails used in making frogs and switch points.

179. Spikes and rail fastenings, renewals of: This account includes the cost of spikes, splices and angle plates, bolts, nuts, and nut locks, washers, rail braces, etc., and freight on same.

180. Station buildings, repairs and renewals of: This account includes all expenditures of labor and material for repairs of station and other buildings used in connection with the movements of traffic, comprising the following expenses:

Fences around station grounds, grading and laying out station grounds, removing old station buildings. Following is a list of structures covered:

Buildings at Panama occupied by employees.	Station platforms.
Passengers and freight depots.	Warehouses.
Station grounds and yards (filling, drainage, etc.).	Buildings at La Boca,
Sidewalks.	House for electric-light plant.

The expenses of repairs and renewals of furniture and fixtures used in buildings should also be charged to this account, such as—

Awnings.	Ice boxes.	Settees.
Chairs.	Mats.	Shelving.
Clocks.	Office railings.	Signs.
Counters.	Pigeonhole cases.	Tables.
Desks.	Safes.	Lighting plant, apparatus,
Ticket cases.	Scales.	and fixtures.

181. Shop buildings, water and fuel stations, repairs and renewals of: This account includes all expenditures of labor and material for repairs of buildings used in connection with the maintenance of equipment, comprising the following expenses:

Excavation, foundations, drainage, water and sewer pipe and fixtures, fences around shop grounds, water and fuel stations, cisterns and wells for supplying shops, grading, laying and improving shop grounds, removing old shop buildings, water tanks, coaling plants, etc.

The following is a list of structures covered:

Car shops.	Oil houses.	Shop grounds and yards.
Coal trestles.	Outhouses at shops.	Stove houses.
Engine houses.	Roundhouses.	Turntables.
Machine shops.	Sand houses.	Water tanks.

The expense of repairs and renewal of furniture and fixtures used in buildings should also be charged to this account, such as—

Awnings.	Cranes.	Safes.
Bins.	Desks.	Scales.
Boilers for pumping engines.	Ice boxes.	Settees.
Chairs.	Mats.	Shelves.
Cisterns.	Pigeonhole cases.	Stationery.
Clocks.	Pipe.	Engines.
Coal boxes.	Pipe lines.	Tables.
Coal buckets.	Pumping engines.	
Counters.	Pumps and fixtures.	

182. Stationery and printing: This account includes all expenses for stationery, stationery supplies, and printing, including books, blank forms, etc., used in connection with maintenance of way and structures.

183. Section houses, tool houses, etc., repairs and renewals of: This account includes all expenditures of labor and material for repairs of buildings used in connection with the maintenance of roadway, comprising the following expenses: Excavations, foundations, drainage, etc., removing old section houses, etc.

184. Ties, renewals of: This account includes cost of cross or switch ties laid in main track or sidings, depots, yards, or buildings, on turntable, wharves, track scale, bridges, trestles, or culverts; also cars of inspection and transportation.

185. Telegraph, repairs and renewal of: This account includes all expenditures of labor and material for repairs and renewal of telegraph and telephone lines, including poles, wire, insulators, instruments, battery jars, switchboards and appurtenances, telegraph signs, telegraph tables, climbers, etc.; wages of line repairers and cost of tools used by them.

186. Weeds, brush, grass, etc., removal of: This account includes all expenditures of labor and material used in cutting and removing weeds, brush, and grass from right of way; cost of scythes and other tools used exclusively for above purposes.

LIGHTERAGE, OPERATING EXPENSES.

200. Fuel and water: This account includes the cost of coal and water furnished tugs, lighters, and hoisting engines.

S. Doc. 420, 59-1—7

201. Hospital service: This account includes the salary of surgeon at Isla de Naos, medicines, druggists' sundries, and other supplies used in the treatment of sick and injured, payments to hospital for care and treatment of employees injured in company's service.

202. Incidentals: This account includes all expenditures in connection with lighterage service which can not be classified under other headings in this section.

203. Labor on cargo, Panama and La Boca: This account includes wages of stevedores, boatmen, foremen, cranemen, and laborers loading and discharging cargo.

204. Labor on cargo, Isla de Naos: This account includes wages of stevedores, boatmen, foremen, and laborers loading and discharging cargo.

205. Lighters, expenses while out of commission: This account includes wages of crew and supplies while undergoing general repairs.

206. Lighters, repairs and renewals of: This account includes all expenditure of labor and material necessary to maintain lighters in efficient working order (both ordinary and that made necessary by wrecks or accidents), raising sunken lighters, etc. It also includes cost, repairs, and renewals of furniture and fittings.

207. Other lighterage equipment, repairs and renewals of: This account includes all expenditure of labor and material necessary to maintain small boats, cranes, Panama ways, stationary engines, etc., in efficient working order; also proportion of repairs to transporters, La Boca pier, to cover wear and tear while handling cargo to and from lighters.

208. Supplies: This account includes the cost of all supplies furnished tugs and lighters, viz: Flags, hose, lanterns, lamps, oil, waste, rope, mops, axes, bed linen, cooking utensils, shovels, tableware, duck chain, anchors, etc.

209. Superintendence and clerks: This account includes proportion of salary of wharf superintendent, salary of clerks making up lighterage accounts, and check clerks employed at Isla de Naos, and all expenses of same.

210. Subsistence, tugs: This account includes cost of subsistence of officers and crews of tugs when in service.

211. Subsistence, laborers, Isla de Naos: This account includes the cost of subsistence of foremen and laborers engaged in handling cargo on lighters.

212. Tugs, repairs and renewals of: This account includes all expenditure of labor and material necessary to maintain tugs in efficient working order (both ordinary and that made necessary by wrecks or accident), raising sunken boats, etc. It also includes cost, repairs, and renewals of such articles of furniture as are necessary to equip the boats for service.

213. Tugs, expenses while out of commission: This account includes salaries of officers and crew, subsistence, supplies, etc., while undergoing general repairs or out of active service.

214. Wages of crews: This account includes salaries of captains, engineers, oilers, firemen, quartermasters, sailors, and others employed on the tugs and lighters while in active service.

DOCKS AND WHARVES.

220. Docks and wharves, Colon, repairs and renewals of.

221. Docks and wharves, Panama, repairs and renewals of: These accounts include all expenditure of labor and material for repairs and renewals of wharves, docks, piers, bulkheads, etc., including painting; also expense of operating pile drivers, tugs, floats, dredges, mud scows, etc., while engaged in making such repairs and in dredging at such points.

222. Harbor master and light-house keeper: This account includes proportion of salary of harbor master and wages of light-house keeper.

223. Light-house, repairs and renewals of: This account includes all expenditure of labor and material for renewals and repairs to light-house.

224. Light-house, supplies: This account includes cost of oil, wicks, chimneys, and other supplies.

225. La Boca pier, repairs and renewals of: This account includes all expenditures of labor and material for repairs and renewals of La Boca pier and for repainting same; also expenses of operating tugs, floats, etc., while engaged in making such repairs.

226. Dredging La Boca basins: This account includes all expenditures for dredging and cleaning basins and channels, and expenses of operating dredges, clappets, etc., engaged in dredging to preserve proper depth of water.

227. Clappets and dredges, repairs and renewals of: This account includes all expenditures for labor and material necessary to maintain clappets, dredges, etc., in efficient working order.

228. Basin and channel buoys, repairs and renewals of: This account includes all expenditures of labor and material for repairs and renewals of buoys, anchors, chains, etc.

REAL ESTATE.

230. Colon buildings, repairs and renewals of: This account includes cost of labor and material for repairs and renewals of all Colon buildings except those covered by other accounts.

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houses

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order.
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Year bu
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ter.
Gross to
Net ton
Length
Breadth
Depth
Engines
Speed
Accom
Cabin
Steel
Original

231. Colon buildings, repairs of existing furniture: This account includes the cost of repairs of existing furniture in buildings occupied by employees of the company.

232. Legal and other expenses: This account includes all expenditures for account of real estate not used strictly for railroad purposes, such as salary and expenses of lawyers, clerks, and other employees attending to the leasing and renting of property, legal and court expenses, repairing and renewing sidewalks and road around the beach, cutting grass and removing weeds, oil and lamps for lighting streets, rental of property, watchmen, beach houses, etc.

LOADING AND DISCHARGING VESSELS AT LA BOCA.

250. Transporters, La Boca pier, fuel, water, and other supplies: This account includes cost of water, coal, and other supplies, such as rope, chain, blocks, slings, oil, tallow, waste, etc., furnished for the operation of the transporters.

251. Transporters La Boca pier, repairs and renewals of: This account includes all expenditures for labor and material to maintain the transporters and tracks in efficient working order.

252. Labor on pier.

253. Labor on ships: These accounts include wages of foremen, slingmen, and other laborers loading and discharging cargoes. Wages of engineers and firemen running transporters and ship's winches, if used, should be charged to these accounts.

254. Superintendence and clerks: This account includes proportion of salary of freight agent and port captain, salary of clerks and other employees engaged in a supervisory capacity.

255. Other supplies and expenses: This account includes miscellaneous expenses, such as electric lamps and other lamps used for lighting ship's holds, their supplies and repairs: hawsers and fenders, spars and floats, gangplanks, etc.

EXHIBIT B 9.

Vessels owned.

Questions answered.—Statement as to the number, kind, and character of the ships owned by the company: where employed: their condition: how long in use: the original cost.

Questions answered in part.—Amount expended on each for repairs. Give expenses monthly and per annum for maintaining and operating each ship, and earnings of each ship per month and per annum for the last five years.

No steamer voyage accounts are kept on the company's books. Therefore we are unable to give the amount expended on each ship for repairs, or the earnings of each ship per month and per annum.

Statements of the amount spent on each ship for general and extraordinary repairs while out of commission are given; also a statement of earnings and expenses as a line, together with detailed statements of steamer and agency expenses.

The company has three iron freight and passenger steamships, all employed on the steamship line running between New York and Colon, as follows:

	Albanca.	Advance.	Financ.
Year built.....	Septem- ber, 1886.	March, 1883.	January, 1883.
For United States and Brazil Mail Steamship Company Builder, Delaware River Iron Shipbuilding and Engine Works, Ches- ter.			
Gross tonnage.....	2,985	2,905	2,903
Net tonnage.....	2,205	1,902	1,920
Length.....feet.	303	295	300
Breadth.....do.	42	38.4	38.4
Depth.....do.	23.9	23.4	23.4
Engines.....			
Speed.....knots.	13	13	13
Accommodations.....			
Cabin.....	76	64	64
Steerage.....	66	66	62
Original cost of construction.....	\$350,000	\$325,000	\$325,000

^a Compound.

CONDITION.

Allianca.—This vessel is classed "1" in the Record of American and Foreign Shipping until September, 1906, when extensive repairs will be necessary to continue in that class. Large repairs were made to this vessel in 1896-97, i. e., new boilers, electric lights, pole masts, etc., so that it is not expected she will require as extensive overhauling as did the *Finance* and *Advance*.

Advance and Finance.—These vessels were classed "1" in the Record of American and Foreign Shipping until 1903; since then they have been practically reconstructed at an expense of approximately \$200,000 each, and they are now in Class "1" in the "Record" for six years to 1909.

Steamship Allianca.

Chartered in June, 1894; bought in March, 1895, for.....	\$132,890.34
Add for electric plants, new staterooms and other additions in 1897.....	21,262.63
Cost, as per ledger.....	154,152.97
General and extraordinary repairs:	
In 1897 there was expended under contract for new boilers and special repairs.....	83,645.59
In 1899 for repairs of crank shaft.....	1,372.47
These expenditures were carried to the debit of a special account and a pro rata amount was transferred to operating expenses each month, thus absorbing the whole amount by the end of 1899.	
In 1903 there was expended for shoe plates and general overhauling of hull and bulkheads, etc.....	5,814.17
This amount is now being charged to operating expenses of the line at the rate of \$250 per month.	
Besides above there was charged direct to steamer expenses for special repairs made in 1897.....	5,844.52
For special repairs made in 1900.....	14,275.91
For special repairs made in 1903.....	2,529.96
Plus added to capital account.....	21,262.63
Making a total of.....	134,745.25

Which represents expenditures for special repairs while ship was out of commission.

Steamship "Advance."

Chartered in June, 1894; bought in March, 1895, for.....	\$101,882.58
Add for electric plants, new staterooms, and other additions in 1897.....	6,013.52
Cost as per ledger.....	107,896.10
General and extraordinary repairs:	
In 1897 there was expended under contract for special repairs.....	36,670.02
These expenditures were carried to the debit of a special account and a pro rata amount was transferred to operating expenses each month, thus absorbing the whole amount by the end of 1899.	
In 1903-4 there was expended for new boilers and general overhauling of engines, etc., and rebuilding of deck houses, etc.....	204,114.50
Of this amount \$51,375 was charged to depreciation fund and the balance is being transferred to operating expenses at the rate of \$1,750 per month.	
For special repairs in 1897 charged direct to steamer expenses.....	5,837.21
For special repairs in 1900 charged direct to steamer expenses.....	10,782.27
Plus added to capital account.....	6,013.52
Making a total of.....	263,417.52

Which represents expenditures for special repairs while ship was out of commission.

Steamship "Finance."

Chartered in June, 1894; bought in March, 1895, for.....	\$101,882.58
Add for electric plants, new staterooms, and other additions in 1897.....	6,237.62
Cost as per ledger.....	<u>108,120.20</u>

General and extraordinary repairs:

In 1897 there was expended under contract for special repairs..... 33,673.51

These expenditures were carried to the debit of a special account and a pro rata amount was transferred to operating expenses each month, thus absorbing the whole amount by the end of 1899.

In 1904 there was expended for new boilers and general overhauling of engines, machinery, etc., and rebuilding of deck houses etc..... 188,550.37

Of this amount \$51,375 was provided for out of the depreciation fund and the balance is being transferred to operating expenses at the rate of \$1,250 per month.

For special repairs in 1897 charged direct to steamer expenses..... 6,275.01

For special repairs in 1900 charged direct to steamer expenses..... 13,073.19

Plus added to capital account..... 6,237.62

Making a total of..... 247,809.70

Which represents expenditures for special repairs while ship was out of commission.

PANAMA RAILROAD STEAMSHIP LINE.

Statement of earnings and expenses for the years 1896 to 1903, inclusive, and 11 months of 1904.

	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	11 months, 1904.
EARNINGS.									
Freight.....	\$468,878.00	\$484,100.31	\$478,731.62	\$504,131.92	\$769,225.02	\$718,607.88	\$652,906.87	\$674,440.02	\$720,398.80
Treasure.....	11,261.36	9,274.24	10,037.97	7,702.21	8,044.02	4,951.65	5,536.51	5,119.86	8,413.28
Mails.....	55,862.06	56,405.69	50,917.78	53,189.72	60,019.80	79,015.83	83,013.99	81,015.34	97,865.62
Extra baggage.....	2,758.22	2,049.16	1,285.04	1,949.85	2,047.63	2,186.69	1,945.07	1,905.90	2,097.87
Passengers.....	40,673.14	111,781.06	74,801.20	100,621.00	128,234.78	154,571.58	150,824.81	154,238.89	209,032.23
Miscellaneous.....	11,770.80	6,816.50	4,319.33	5,075.38	3,973.19	7,517.21	4,008.88	3,859.90	4,853.98
Salvage schooner <i>Kaplan</i>					1,841.69				
Total.....	691,204.78	670,486.99	620,183.94	762,470.08	975,985.23	986,830.84	898,316.13	920,579.91	1,043,181.78
EXPENSES.									
Steamer expenses.....	351,216.74	370,067.23	399,459.46	421,952.82	576,391.96	585,877.45	552,276.80	519,298.10	570,434.77
Replacement of boilers and special repairs to steamers.....	2,199.96	57,000.00	57,000.00	41,361.59				6,750.00	21,273.50
Depreciation of steamers.....		41,100.00	40,520.00	20,520.00					
Agency expenses.....	102,253.42	101,622.62	101,613.52	110,392.40	116,089.67	117,202.81	117,137.92	105,264.32	94,036.50
Charter of steamers.....	13,500.00	13,316.67		47,515.38	149,634.79	164,929.38	120,570.19	234,104.17	182,394.53
Steamer <i>Admiral</i> out of commission.....								3,676.07	
Steamer <i>Finance</i> out of commission.....								3,220.92	
Total.....	469,170.12	588,136.62	599,172.98	641,742.19	833,716.42	868,009.64	789,984.97	872,253.78	888,139.00
Earnings over expenses.....	222,034.66	87,350.37	21,010.96	120,727.89	142,298.81	98,841.20	108,331.16	48,326.13	175,042.78

NEW YORK, February 1, 1905.

Statement showing steamer expenses in detail for the years 1896 to 1903, inclusive, and eleven months of 1904.

	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	11 months, 1904.
Account.									
1. Ballast.....	\$11,005.03	\$10,582.65	\$10,335.25	\$11,206.67	\$12,753.81	\$15,279.23	\$14,940.60	\$13,823.58	\$5,540.90
2. Custom-house and port charges.....	2,083.04	1,400.13	3,402.23	1,571.78	3,426.30	6,026.68	737.13	1,191.25	120.45
3. Docking.....	2,814.98	2,962.38	3,402.23	4,311.71	6,794.71	6,026.73	3,208.93	1,713.55	7,079.02
4. Equipment, deck department.....	1,348.97	1,314.13	1,928.74	612.59	807.37	3,982.74	1,368.75	1,308.67	1,544.17
5. Equipment and spare machinery, engine department.....	3,336.16	6,318.12	1,016.40	3,578.25	3,287.03	3,578.74	2,588.99	1,521.15	1,721.15
6. Equipment, commissary department.....	59,157.04	56,538.31	59,379.92	65,614.80	89,512.67	111,450.11	108,923.81	117,375.47	110,640.21
7. Fuel.....	41,344.33	38,915.67	36,691.91	40,204.03	51,089.83	39,011.32	42,720.13	68,723.89	78,296.13
8. Feeding passengers and crew.....	683.81	724.95	366.75	1,138.18	1,683.33	300.97	1,683.33	2,468.95	1,592.15
9. Incidentals.....		5.91	173.34	199.99	173.04	400.11	400.23	400.23	400.23
10. Injuries to persons.....	54,039.47	60,652.00	69,281.02	92,098.94	121,072.38	121,278.24	103,996.43	105,960.53	119,655.22
11. Labor on cargo.....	8,324.12	8,047.02	10,324.05	11,624.25	12,196.91	14,336.98	13,920.72	13,023.69	13,213.83
12. Labor on coal.....									

13. Labor on ashes.....	428.30	802.20	574.40	902.10	1,291.00	1,435.00	1,299.00	1,200.50	1,084.70
14. Loss and damage.....	2,314.70	1,084.90	1,025.37	1,425.10	3,184.06	6,038.14	10,800.79	5,440.15	3,049.56
15. Oil and waste.....	2,270.05	2,270.42	1,729.53	975.80	1,523.80	2,107.42	2,231.91	2,376.68	2,460.14
16. Painting ships' bottom.....	1,090.00	1,412.00	820.00	1,736.88	2,815.04	1,403.00	1,435.00	545.50	438.00
17. Pilots and towage.....	5,780.16	5,297.60	5,429.78	7,247.52	8,156.19	8,836.68	7,747.04	7,816.03	8,020.79
18. Quarantine.....	380.00	4,343.62	921.75	560.00	979.00	938.00	847.70	797.50	620.00
19. Repairs, deck department.....	3,806.92	17,387.79	3,010.48	7,803.15	30,362.54	12,927.80	9,267.65	4,631.44	7,006.23
20. Repairs, engine department.....	19,094.88	5,980.36	10,931.94	21,779.70	48,104.37	18,380.80	11,070.32	13,854.93	13,854.93
21. Repairs, commissary department.....	3,272.96	7,355.74	1,777.00	2,978.25	5,904.94	7,285.97	3,305.01	797.68	3,318.38
22. Stores, deck department.....	3,363.41	5,440.29	1,636.76	6,864.64	7,157.07	6,016.39	5,498.87	3,254.81	4,968.20
23. Stores, engine department.....	2,783.59	2,999.20	2,083.16	2,570.88	3,745.96	3,611.63	3,074.83	2,338.55	3,738.50
24. Stores, commissary department.....	1,505.51	1,178.90	1,036.17	1,108.00	1,490.92	1,741.64	1,707.92	1,865.94	2,206.01
25. Stores, surgeons department.....	397.55	422.01	246.51	258.77	358.00	493.18	491.37	380.14	527.33
26. Stationery and printing.....	1,308.53	707.96	1,019.19	1,258.03	430.46	875.98	748.37	756.57	1,022.76
27. Telegrams and cables.....	630.30	769.50	1,076.42	1,044.10	1,463.54	1,205.78	901.30	925.17	871.30
28. Wages.....	94,041.19	90,662.35	94,804.49	94,658.55	116,968.22	130,331.36	132,639.94	131,273.92	134,567.70
29. Wages, special.....	7,677.07	9,080.37	10,275.81	10,253.93	11,453.53	12,578.43	11,363.14	9,352.35	13,513.85
30. Water.....	984.58	965.11	848.72	924.57	1,227.37	1,772.11	2,063.01	3,044.09	3,631.81
31. Washing.....	3,213.75	2,418.27	1,601.69	1,865.01	3,369.86	3,882.74	2,900.47	8,075.44	14,422.92
32. Wines and liquors.....	11,070.24	20,317.98	59,649.49	22,760.05	22,728.10	22,760.53	22,900.47	14,422.92	14,422.92
33. Insurance.....	351,216.74	370,067.53	399,459.46	421,952.82	576,891.96	585,877.45	552,276.86	519,398.10	570,434.77
Total.....	102,253.42	101,622.62	101,613.32	110,362.40	116,689.67	117,202.81	117,137.92	105,204.52	94,036.50

Statement showing agency expenses steamship line (New York and Colon) in detail for the years 1896 to 1903, inclusive, and eleven months of 1904.

Account.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	11 months 1904.
50. Advertising, newspapers.....	\$4,871.29	\$2,579.43	\$2,079.72	\$1,865.70	\$2,885.15	\$2,000.30	\$2,422.04	\$2,613.98	\$2,500.79
51. Buildings, docks and wharves, repairs and rent of.....	38,377.57	47,344.32	52,316.16	53,781.77	53,313.71	57,388.31	55,921.97	45,820.76	37,177.40
52. Buildings, docks, and wharves, other expenses.....	5,726.30	5,319.65	4,839.44	5,280.97	7,156.75	5,362.49	7,947.30	5,844.44	5,764.45
53. Commissions, passengers.....	1,097.92	1,032.97	750.48	739.75	1,307.80	1,759.21	1,774.75	1,000.75	1,164.75
54. Insurance.....	2.95	57.20	9.42	12.10	639.32	163.00	218.54	65.00	37.35
55. Injuries to persons.....	531.63	95.35	9.42	25.88	639.32	163.00	218.54	65.00	37.35
56. Incidentals.....	12,809.46	11,343.47	10,246.90	13,154.56	17,371.27	16,645.71	16,091.58	15,300.82	15,434.85
57. Labor, general.....	5.00	11.26	11.26	43.40	43.40	304.17	139.83	83.85	5.00
58. Legal services and expenses.....	34,822.50	31,548.90	29,183.48	30,931.65	29,436.51	29,208.42	30,440.84	31,158.57	28,419.55
59. Loss and damage.....	1,035.41	1,048.14	910.80	1,038.81	1,486.61	1,443.80	1,135.24	1,616.57	2,411.36
60. Salaries of agents and clerks.....	91.73	6.10	12.87	7.41	13.17	112.60	54.00	32.58	78.28
61. Stationery and printing.....	1,200.00	1,200.00	1,200.00	990.00	990.00	1,000.03	1,000.03	1,000.02	1,022.22
62. Telegrams and cablegrams.....	1,200.00	1,200.00	1,200.00	990.00	990.00	1,000.03	1,000.03	1,000.02	1,022.22
63. Taxes.....	1,200.00	1,200.00	1,200.00	990.00	990.00	1,000.03	1,000.03	1,000.02	1,022.22
64. Revenue stamps.....	1,200.00	1,200.00	1,200.00	990.00	990.00	1,000.03	1,000.03	1,000.02	1,022.22
Total.....	102,253.42	101,622.62	101,613.32	110,362.40	116,689.67	117,202.81	117,137.92	105,204.52	94,036.50

NEW YORK, February 6, 1905.

EXHIBIT B 10.

Vessels chartered.

Questions answered.—How many vessels are chartered; how long have they been chartered; rate at which chartered; size and character of each ship.

Questions unanswered.—Original cost of each ship; value at time of chartering; cost of maintaining each ship per month and per annum.

These can only be answered by the New York and Cuba Mail Steamship Company, the owners of the vessels.

Cost of operating each ship per month and per annum; earning of each ship per month and per annum.

No separate voyage accounts are kept by the company, and therefore these two questions can not be readily answered. Statements showing earnings and expenses of the steamship line have been prepared.

NEW YORK, February 1, 1905.

Steamship City of Washington.

Freight and passenger vessel, built of iron, American registry, single screw; engines, triple expansion; speed, about 14 knots; length, 300 feet; width, 38 feet; depth, 27 feet; gross tonnage, 2,683; net tonnage, 1,744.

Passenger accommodations: Cabin, 60; steerage, 30.

Term of charter:	Per day.
January 11, 1901, to July 26, 1901.....	\$250. 00
October 24, 1902, to April 21, 1903.....	200. 00
September 26, 1903, to June 7, 1904.....	200. 00
October 25, 1904, to —————	200. 00

NEW YORK, February 1, 1905.

Steamship Orizaba.

Freight and passenger vessel, built of steel, American registry, single screw; engines, triple expansion; speed, about 14 knots; length, 336.2 feet; width, 43.2 feet; depth, 22 feet; gross tonnage, 3,497; net tonnage, 2,334.

Passenger accommodations: Cabin, 76; steerage, 30.

Term of charter:	Per day.
July 27, 1901, to February 6, 1902.....	\$260. 00
February 6, 1902, to July 25, 1902.....	230. 00
December 13, 1904, to —————	250. 00

NEW YORK, February 1, 1905.

Steamship Yucatan.

Freight and passenger vessel, built of iron, American registry, single screw; engines, triple expansion; speed, about 14 knots; length, 336.2 feet; width, 43.2 feet; depth, 22.3 feet; gross tonnage, 3,525; net tonnage, 2,317.

Passenger accommodations: Cabin, 76; steerage, 30.

Term of charter:	Per day.
July 25, 1902, to August 20, 1902.....	\$230. 00
April 6, 1903, to November 25, 1904.....	250. 00

NEW YORK, February 1, 1905.

Steamship Seguranca.

Freight and passenger vessel, built of steel, American registry, single screw; engines, triple expansion; speed, about 14 knots; length, 321.8 feet; width, 45.2 feet; depth, 33.8 feet; gross tonnage, 4,115; net tonnage, 2,933.

Passenger accommodations: Cabin, 101; steerage, 30.

Term of charter:	Per day.
August 22, 1902, to September 2, 1904.....	\$262. 50
November 25, 1904, to —————	262. 50

NEW YORK, February 1, 1905.

EXHIBIT B 11.

Number of agencies, where located, expenses of maintaining, etc.

San Francisco.—Mr. B. H. Langley, agent; salary, \$1,800 per annum; Stenographer, \$65 per month; office rent, \$40 per month.

Expenses for 1904:

Salaries.....	\$2,580.00
Rent.....	480.00
Stationery.....	76.13
Telegrams.....	34.89
Postage, telephone, and other expenses.....	232.02

Total..... 3,403.04

General solicitor of traffic in connection with the work of the New York office and the steamship lines to and from Europe connecting with railroad at Colon.

Special agent—West coast of Central and South America—Headquarters, Guatemala City.—Mr. P. H. Cahill; salary, \$3,000 per annum and actual expenses while traveling, which amounted in 1904 to \$915.34.

Traveling agent: Soliciting freight and keeping New York office advised of the situation at the west coast ports and what necessities exist for making changes in rates and fares for the movement of cargo in competition with other routes.

Representative at Bogota.—Mr. A. Mancini; salary, \$1,200 per annum.

Diplomatic representative and attorney at Bogota. Salary and expenses amounted to general expenses, New York. Cablegrams—only other expense—amounted in 1904 to \$513.31.

Special agent, Panama.—Mr. J. A. Arango; salary, \$1,500 per annum.

Intermediary between Government and railroad.

Ticket agents.—William H. Eaves, Boston, Mass.; James Hogan, Philadelphia, Pa.; Thomas Cook & Son, New York, London, Paris; Sewall & Crowther, London, England; Transatlantic steamship lines in Europe.

Authorized to sell tickets, on commission, by our steamship line, from New York to Colon and Panama, and ports on the west coast of Central and South America, Mexico, and San Francisco.

NEW YORK, February 6, 1905.

EXHIBIT B 12.

Question.—Why are the rates from New York and Europe to Buenaventura, etc., greater than to Guayaquil and other points south?

Answer.—The rates to all of the ports on the west coast of South America vary directly with the degree of competition. The time required for transit from New York and from Europe via the Straits of Magellan to Valparaiso is little, if any, longer than the time required to transport and rehandle cargo via the Isthmus. In order for the Isthmus to secure any traffic for Valparaiso it is necessary closely to approximate the low rates made by the lines via the Straits of Magellan. The rates for insurance favor the Isthmus route, while the risk of damage from handling goods is against the Isthmus route. The time required via the Straits to reach the ports nearer Panama increases the value of transportation via the Isthmus until the maximum is reached at Panama, to which the transit from New York occupies, say, only ten days. Guayaquil is a strongly competitive port, many vessels proceeding to that port via the Straits from New York and from Europe during the course of the year. It is extremely rare for a large enough quantity of cargo to be offering for a small port like Buenaventura to induce a vessel to go there, other than the small steamers which operate from Panama in connection with our line and make it their business to serve all of the small ports between Panama and Guayaquil in rotation.

R. L. WALKER, *Traffic Manager.*

EXHIBIT B 13

Question.—Why is the through rate per ton, as shown by letter to Mr. Burr, for freight from Europe to Panama greater than the rate to Pacific ports both north and south?

Answer.—The letter to Mr. Burr, September 24 last, deals with the proportions of through rates, and the railroad proportion of through rates to Panama is much greater than the railroad proportion of through rates to ports both north and south of Panama, because to Panama the through rates are divided between only two carriers, whereas the through rate to ports beyond Panama are divided between three carriers. As a matter of fact, the through rate from Europe to Panama on first-class goods is lower than the through rates to Central America and to the ports between Panama and Guayaquil (Buenaventura, etc.), as may be noted more particularly in the Hamburg-Amerika Linie Tariff, No. 17, of November, 1902, herewith. This is because the carriers are entitled to greater consideration for the longer distance.

To ports south of Guayaquil the first-class rate, in common with other rates, is lower than the rates to Panama, because the lines via the Straits of Magellan can give a service of a value more nearly the value of the service via the Isthmus. Where the rates on second and third classes to Central America and Mexico are less than the rates to Panama, it is to meet the same competition created via the Straits of Magellan, but the steamers operating via Magellan have never found it to their interest to establish regular calls at Panama to compete with the direct and quick service from Europe via Colon, giving the maximum saving of time.

The average through rate from Europe to Panama in 1903 was \$17.72 per ton, whereas the average through rate to the ports in Central America was \$15.20, and to the minor ports of Ecuador and Colombia was \$15.04 a ton. On the other hand, from New York the comparison is reversed, the average through rate from New York to Panama having been \$12.42, while to Central America the average through rate was \$15.81. This shows that Panama looked to Europe for goods of high value and to New York for staples. We carried flour, rice, soap, etc., New York to Panama, at from \$6 to \$8 per ton to compete with sales in San Francisco shipped to Panama by Pacific Mail Steamship Company.

We have not agreed with those of the merchants of Panama who thought Panama should always have lower rates than rates to other ports on the Pacific. The rates are not based on sentiment. They are the results of a bargain with the Government of Panama (Colombia), which by the contract declared the railroad an enterprise of public utility (Article XIII), in which their share was to be \$250,000 per annum (Article III) and certain transportation to be furnished free (Article XIX). For the people the Government required the railroad to transport the products of Colombia at half the rates that the company might fix for the same service for other peoples (Article XX and amendment, August 18, 1891). The absence of any stipulation to the contrary shows that the Government expected the inhabitants of the Isthmus to pay such rates of freight on other commodities as trade conditions might make fair. Commerce foreign to Panama crossing the Isthmus could not be expected to produce the whole tax.

R. L. WALKER, *Traffic Manager.*

FEBRUARY 6, 1905.

[*Alterations since the preceding edition are in *italics*.*]

Edition No. 17. 1st November, 1902.

Hamburg-American Line, in connection with the Panamá Railroad Company, the Pacific Mail Steamship Company, the Pacific Steam Navigation Company, the Compañía Sud-Americana de Vapores, or any other steamer line.

Rates of freight for goods from Hamburg, Bremen, and Antwerp via Colon to ports on the west coast of America. Rates from Grimsby and Havre as per special tariff of the company's agencies.

All freight rates are "in full," no primago being charged. All freights must be prepaid on delivery of the bills of lading and will not be returned, ship or goods lost or not lost at any stage of the entire transit. All packages must be strongly packed, distinctly marked and numbered, and the port of destination must be plainly marked on the same. Charges taken forward on bill of lading will not be admitted. No bills of lading will be signed except such as are made out on the company's forms. Goods of an inflammable or otherwise dangerous or damaging nature, arms and war material, also heavy and voluminous packages and rails are admissible only upon special agreement.

Rates of freight from Hamburg, Bremen, and Antwerp.

		Class 1. Class 2. Class 3. Class 4.					
To—		Per ton weight of 1,000 kilos or per ton of 40 cubic feet, English measurement, at company's option. Sugar and rice in bags and cement in barrels per ton weight.				If shipped on one bill of lading in lots of—	
		All goods of a value of £200 and above per freight ton will be charged as class No. 1, except those paying freight ad valorem and exceptional goods				Specie, bullion, jewelry, and valuables on value.	
						Per cent.	
West central America East of Mexico	Panamá*	120	100	80	60	35	1
	Punta Arenas	120	85	75	60	45	1
	San Juan del Sur, Corinto						
	Amapala, La Unión,						
	El Triunfo, La Libertad,						
	Acajutla, San José de	150	85	75	60	45	14
	Guatemala, Champerico, Ocosingo						
	Acapulco, Manzanillo,						
	San Blas, Mazatlan,						
	San Benito, Tonala, Salina Cruz, Puerto Angel.						
California: San Francisco							
Victoria	80						
Vancouver							
Honolulu							
South Pacific	Buenaventura*, Tumaco*	150	75	60	45		
	Esmeraldas*						
	Bahía* (Caracas), Manta,*	150	60	45	30		14 plus 2 sh. 6 per cubic foot.
	Puerto Bolívar, Guayaquil	150	60	45	30		
	Payta, Pimentel*, Eten, Pascamayo, Salaverry	150	60	45	30		
	Callao, Pisco, Mollendo, Ilo, Arica	100	50	45	30		
	Piñeros, Iquique, Antofagasta, Taltal, Caldera	100	45	40	30		
	Carrizal Bajo, Coquimbo, Valparaiso						

Minimum charge for freight: Panamá, 21/-; all other ports, 11/6 per B/L.

* Iron or steel: Axes, bar, fish plates, hoop, plates, rails, sheets, wheels (without axles) for Buenaventura, Tumaco, Esmeraldas*, Bahia* and Manta*, 52/-; and for Guayaquil, 35/- per ton weight.
 † Five-ton lots of iron and steel: Fish plates, hoops, pigs, plates, rails, sheets, and besides pig lead and salt in bags for Central America and Mexico, 40/- per ton.

Panamá, South Pacific, Central America, North Pacific.

For shipments on through bill of lading from Amsterdam and Rotterdam via Hamburg or Havre 7 shillings and 6 pence sterling per ton will be added to the tariff rates.

* Additional charges.

All ports, 6d. per freight ton for wharfage at Colon; minimum charge 6d. per B/L.

Panamá, Buenaventura, Tumaco, 5/6 per 1,000 kilos for tonnage tax.

Esmeraldas, Bahia (Caracas), and Manta, 2/6 per ton for municipal tax.

Pimentel, 3/- per ton for transshipping, on lots of less than 10 tons per B/L; nothing to be collected for minimum bills of lading.

Ecuadorian ports, 1% of the value of the shipments; minimum M 1.- per B/L for consular vise.

Colombian ports (except Panamá) 10/-; 4/- per set of bills of lading for consular vise.

Mexican and Peruvian ports, 2/- per set of bills of lading for consular vise.

Pieces and packages over 2 tons weight

Over 2 tons up to 4 tons rate and a half.

Over 4 tons up to 6 tons double rate.

Over 6 tons special arrangements.

Rates and classification of the goods subject to change without notice.

Each additional cubic foot or part thereof.

EXHIBIT B 14.

Question.—What is the minimum rate fixed for business from Europe to Panama and to north and south Pacific ports, and what is the basis of fixing the minimum rate?

Answer.—The minimum rate at which either cocarrier can accept freight to and from Panama and the ports north thereof is 35 shillings per ton. The minimum rate to and from the ports south of Panama is 30 shillings. The minimum rates were fixed in order that the initial carrier might reduce to those figures, if necessary, to secure business promptly without having to consult each of the other cocarriers. As a matter of fact, the minimum is seldom used. If occasion arises to make lower rates than the minimum, it is to be done by consultation between the various carriers which might be interested in the particular business.

R. L. WALKER, *Traffic Manager.*

EXHIBIT B 15.

Question.—What is the minimum rate from New York to Panama and to north and south Pacific ports, and what is the basis on which such minima are fixed.

Answer.—The lowest rate made from New York to Panama is \$6 per 2,000 pounds, a rate which we found necessary to secure any shipments of pitch, tar, resin, and cement. As we are the rate-making power from New York to Panama, we do not have a minimum in the sense that minima exist where cocarriers have to be consulted. The rates agreed upon as minima which we are authorized to make from New York, or which our cocarriers on the Pacific can make to New York, are:

Between New York and San Francisco, 40 cents per 100 pounds.

Between New York and Mexico, 60 cents per 100 pounds, or 30 cents per cubic foot.

Between New York and Central America, 50 cents per 100 pounds, or 25 cents per cubic foot.

Between New York and South America, 30 shillings per ton, W. or M.

These minima may be reduced by mutual consent should necessity arise for lower rates which might be considered remunerative on some particular traffic.

These figures were agreed upon as low enough to meet any ordinary exigency requiring an immediate decision by the initial carrier. If a particular trade needs a lower rate to develop it, the subject is one for correspondence as to whether or not the business offering can be made remunerative at lower rates.

R. L. WALKER, *Traffic Manager.*

FEBRUARY 6, 1905.

EXHIBIT B 16.

Date of sailing of vessels from New York and from Panama (Colon?).

Answer.—Our steamers sail from New York every Tuesday, except when they are delayed until Wednesday, because of holidays, which occur on Mondays or Tuesdays. The sailing dates from Colon are Wednesdays.

R. L. WALKER, *Traffic Manager.*

FEBRUARY 6, 1905.

EXHIBIT B 17.

Question.—Why is the charge on railroad for through passengers so much more than the charge for local passengers?

Answer.—The charge for through passengers on the railroad includes the transfer of from 200 to 250 pounds baggage without charge, while the local passengers pay 2 cents (formerly 3 cents) a pound when they have baggage to be transported.

R. L. WALKER, *Traffic Manager.*

FEBRUARY 6, 1905.

EXHIBIT B 18.

Question.—Give detailed statement of equipment of railroad. Is the equipment sufficient to handle the business, or should additional equipment be provided?

Answer.

List of rolling stock equipment, December 31, 1903.

Locomotives:	
Road engines.....	24
Switch engines.....	11
Passenger cars:	
Special.....	5
First class.....	8
Composite, first and second class.....	2
Second class.....	9
Baggage.....	7
Freight cars:	
Box.....	4
Coal.....	173
Flat.....	151
Miscellaneous:	
Local express.....	22
Wrecking.....	1
Caboose.....	5
Special.....	2
Water.....	9
Stock.....	9
Road department.....	11
Steam pile driver.....	1

The list of rolling-stock equipment remains the same as last year, and all is in serviceable condition, except eleven locomotives, which are not judged worth repairing. Of those in service, ten should have new boilers as fast as they can be substituted. A wrecking crane has lately been added to this equipment of 25 tons capacity. The cars are mostly old and light (12 tons burden, with a few of 20 tons), but all in good working condition. Requisition has been made for 100 box cars and 4 coaches, which would provide for such traffic as that of recent years. A much larger and heavier equipment is expected to be required for use in canal construction, and is under discussion.

Flotilla equipment at the Isthmus.

12 Ancon.....	105	98'	18'0"	5'0" iron.
12 Bolivar.....	234	127'	23'0"	4'6" iron.
1 freight lighters.....	340	110'	24'2"	7'2" steel.
	230			
12 freight lighters.....	50	110'	24'0"	8'6" iron.
	300			
1 coal lighters.....	222	110'	24'0"	8'0" iron.
1 floating pile driver.....		50'	30'0"	1'0" wood.

The list of floating equipment remains the same as last year. Two new freight lighters of 50 tons have been supplied to take the place of two condemned.

EXHIBIT B 19.

Statement of gross receipts, operating expenses, and fixed charges of Panama Railroad Company (steam lines included) for the years 1896 to 1903, inclusive, and 11 months of 1904.

	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	11 months, 1904.
EARNINGS.									
Railroad Steamers:									
Atlantic service:	\$1,291,571.30	\$1,241,912.61	\$1,106,400.37	\$1,098,966.86	\$1,270,906.24	\$1,365,171.56	\$1,239,345.31	\$1,267,570.91	\$1,446,599.16
Pacific service:	691,204.75	670,186.99	620,183.94	762,170.08	915,085.23	960,820.81	808,316.13	920,579.91	1,043,181.78
Miscellaneous:	31,000.65	31,000.65	116,236.86	337,045.02	102,136.18	365,822.76	458,035.90	476,065.45	511,200.00
Total earnings:	2,271,111.51	2,309,705.25	2,112,811.17	2,195,011.96	2,653,191.71	3,196,708.97	2,702,815.63	2,664,051.29	2,891,353.67
EXPENSES.									
Railroad Steamers:									
Atlantic service:	382,398.18	475,108.04	500,437.12	487,711.19	562,062.55	625,262.53	594,709.80	562,240.19	652,764.98
Pacific service:	499,170.12	583,136.02	599,172.98	611,712.19	833,716.12	808,000.61	789,984.97	872,253.78	868,139.00
Miscellaneous:	27,195.71	317,087.52	291,282.79	280,911.81	326,264.78	338,996.64	325,063.71	324,242.50	319,843.99
Total expenses:	1,235,873.81	1,499,236.08	1,390,893.19	1,499,335.19	1,732,063.78	2,440,307.24	1,962,115.77	1,760,337.59	1,840,644.19
Earnings over expenses:	1,035,237.70	810,469.17	721,917.98	775,676.77	921,000.43	756,401.73	840,699.86	903,713.30	1,050,709.48
FIXED CHARGES.									
Subsidy to Colombia:	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00	250,000.00
Sinking fund, first mortgage bonds:	25,728.38	25,728.38	25,728.38	25,728.38	25,728.38	25,728.38	25,728.38	25,728.38	25,728.38
Interest on first mortgage bonds:	208,876.12	208,876.12	208,876.12	208,876.12	208,876.12	208,876.12	208,876.12	208,876.12	208,876.12
Interest on balances due La Boca wharf contractors:	189,619.10	181,308.80	185,241.25	480,175.00	475,928.25	496,811.61	505,315.46	502,645.00	459,053.33
Net income, as per page 9 of annual reports:	545,084.53	404,873.37	266,716.73	215,281.77	416,764.08	259,366.12	285,384.40	401,068.30	561,315.95

^a Debit.

NEW YORK, February 9, 1905.

^b Republic of Panama after November 13, 1903.

At the time authorized General mo-

Less

Deduct

Leav-
These 2,680
\$4,8507 +
Being paid
Proceeds
Balance

Six per cent
1.846 b

Issued No

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21 bon
626 bon
4,000 tota

EXHIBIT B 20.

Statement of bonded indebtedness.

At the time, September, 1897, the \$4,000,000 $4\frac{1}{2}$ per cent bonds were issued, or rather authorized to be issued, the bonded indebtedness of the company was as follows:

General mortgage 7 per cent sterling bonds:	
4,000 bonds of £200 each, say.....	\$4,000,000.00
Less 471 bonds in treasury unissued.....	471,000.00
3,529 bonds.....	3,529,000.00
Deduct 843 bonds acquired by purchase and held in the company's treasury and voluntary sinking fund.....	843,000.00
Leaving 2,686 bonds outstanding in the hands of the public, say ..	2,686,000.00
These 2,686 bonds were redeemed and retired at £200 each, exchange \$4.8507+, amounting to.....	2,612,338.34
Being paid for by:	
Proceeds sale of 2,000 $4\frac{1}{2}$ per cent bonds.....	\$1,907,250.00
Balance from voluntary sinking fund.....	705,088.34
	2,612,338.34
Six per cent gold sinking fund bonds:	
1,846 bonds at \$1,000 each.....	1,846,000.00

Issued November 1, 1880 (original issue, 3,000 bonds), fall due November 1, 1910.

To meet this bonded indebtedness, \$225,000 annually of the Columbian Government subsidy was pledged till March 27, 1908, the same to be applied by the company: First, to the payment of the interest, and, second, as a cumulative sinking fund for the redemption of the principal; the bonds to be drawn yearly in September to an amount equal to the then surplus of the subsidy sinking fund, the drawn bonds to be paid on November 1, after each drawing, and thereby redeeming the whole issue in 1908.

MORTGAGES.

From Jul. 1, 1851, to the end of the year 1854, 7 per cent bonds were issued to the amount of \$2,378,000. These bonds were all subsequently exchanged for capital stock at par.

Between December 31, 1854, and February, 1857, 3,000 (7 per cent) sterling bonds (of £225 each) were authorized and issued, amounting to \$3,375,000. These bonds were retired by the company at various times until 1867 there remained 869 with a value of \$977,625, which were exchanged for issue of sterling mortgage bonds of 1867.

GENERAL MORTGAGE OF OCTOBER, 1867.

Under this mortgage the company was authorized to issue 5,000 general mortgage 7 per cent sterling bonds of £200 each. These bonds were all retired prior to October 1, 1897.

FIRST MORTGAGE OF OCTOBER, 1897.

Which is now in force, authorized issue of 4,000 first mortgage $4\frac{1}{2}$ per cent twenty-year gold bonds of \$1,000 each.

NEW YORK, February 27, 1905.

MEMORANDUM FOR MR. DRAKE RE $4\frac{1}{2}$ PER CENT BONDS.

How issued or disposed of:

- 2,000 bonds sold to retire 7 per cent bonds.
- 1,087 bonds sold account La Boca wharf.
- 265 bonds sold account repairs of ships.
- a 648 bonds balance.

4,000 total authorized issue.

NEW YORK, January 17, 1905.

a Twenty-two of these were drawn by the trustees for redemption October 1, 1904, thus leaving 626 unissued bonds in treasury, as per following statement:

Present standing or location of bonds:

- 2,372 bonds in hands of public.
- 981 bonds redeemed by trustees.
- 21 bonds in treasury by purchase.
- 626 bonds in treasury.

4,000 total authorized issue.

EXHIBIT B 21.

Panama Railroad Company 4½ per cent first mortgage twenty-year sinking fund gold bonds due October 1, 1917.

[Authorized issue, 4,000 bonds of \$1,000 each.]

September 20, 1897, 2,000 bonds issued and sold to Vermilye & Co. at par, less commission.....	\$1,910,000.00
Less interest, September 20 to 30, 1897.....	2,750.00
	1,907,250.00

Proceeds were applied to the redemption of the 7 per cent general mortgage sterling bonds, due October 10, 1897.

September, 1898, 962 bonds^a issued in accordance with resolution of board of directors, passed at meeting of September 22, 1898, and pledged with Panama Canal Company as collateral security for contract cost of new terminal at La Boca.

Drawn for redemption by trustees and proceeds paid to canal company on account of contract indebtedness:

October 17, 1899, 44 bonds at 105 and interest.....	\$47,190.00
October 30, 1900, 38 bonds at 105 and interest.....	40,910.00
October 15, 1901, 5 bonds at 105 and interest.....	5,362.50

Bonds sold to Vermilye & Co. and proceeds paid to canal company:

February 20, 1902, 500 bonds at par.....	500,000.00
And accrued interest, October 1, 1901, to February 20, 1902.....	8,687.50
	508,687.50

April 7, 1902, 375 bonds at par.....	375,000.00
And accrued interest, April 1 to 6, 1902.....	281.25
	375,281.25

April 7, 1902, 125 bonds issued and sold to Vermilye & Co. at par.....	125,000.00
And accrued interest, April 1 to 6, 1902.....	93.75
	125,093.75

Balance (in addition to proceeds of before-mentioned 962 bonds) due and paid Panama Canal Company in final settlement of account new terminal at La Boca.....

Carried to company's cash on hand.....	5,721.07
	119,372.68
	125,093.75

October 29, 1903, 913 bonds issued to the treasury:

August 22, 1904, 265 of these bonds sold to Vermilye & Co. at 104½ per cent.....	276,925.00
And accrued interest, April 1 to August 21, 1904.....	4,670.63
	281,595.63

Proceeds applied to the payment of the cost of repairs to steamships *Advance* and *Finance*.

SUMMARY.

Bonds issued.		Bonds sold.	Bonds in treasury.
September 20, 1897.....	2,000	September 20, 1897.....	2,000
September, 1898.....	962	October 17, 1899.....	44
		October 30, 1900.....	38
		October 15, 1901.....	5
		February 20, 1902.....	500
April 7, 1902.....	125	April 7, 1902.....	375
October 29, 1903.....	913	April 7, 1902.....	125
		August 22, 1904.....	265
Total.....	4,000		3,352

^a Total, 962 bonds.

EXHIBIT B 22.

Panama Railroad Company, summary of operations, month of December, 1904, twelve months ending December 31, 1904.

SUMMARY OF EARNINGS AND EXPENSES FOR MONTH OF DECEMBER, 1904.

	1904.	1903.	Increase.	De-crease.	Per cent. In-crease. De-crease.
EARNINGS.					
Colon to Panama.....	\$81,579.15	\$74,142.87	\$7,416.28		10.03
Panama to Colon.....	49,178.55	41,653.41	7,525.14		18.07
Panama Railroad Steamship Line, Atlantic service.....	100,095.16	92,260.02	7,835.14		8.49
Joint railroad and steamship re- ceipts.....	175,673.09	118,264.48	57,408.61		48.54
Total earnings.....	406,525.95	326,320.78	80,185.17		24.57
EXPENSES.					
Operating railroad.....	74,254.26	57,202.81	17,051.45		29.84
Operating steamship line, Atlantic service.....	90,220.95	81,212.45	9,008.50		11.09
Joint railroad and steamship ex- penses.....	50,124.61	44,580.89	5,543.72		12.44
Panama Railroad Steamship Line, Pacific service.....		3.60		3.60	100.00
Total expenses.....	214,599.82	183,000.75	31,599.07		17.28
Earnings over expenses.....	191,926.13	143,319.03	48,607.10		33.92
Fixed charges.....	12,755.54	11,755.54			
Profit.....	179,170.59	131,563.49	47,607.10		36.21

FOUR EARNINGS AND EXPENSES FOR MONTH OF DECEMBER, 1904.

EARNINGS.						
Colon to Panama.....	\$81,579.15	\$74,142.87	\$7,416.28		10.03	
Panama to Colon.....	49,178.55	41,653.41	7,525.14		18.07	
Panama Railroad Steamship Line, Atlantic service.....	100,095.16	92,260.02	7,835.14		8.49	
Joint railroad and steamship receipts.....	175,673.09	118,264.48	57,408.61		48.54	
Panama Railroad Steamship Line, Pacific service.....		3.60		\$ 0		100.00
Total earnings.....	406,525.95	326,320.78	80,185.17		24.57	
EXPENSES.						
Operating railroad.....	74,254.26	57,202.81	17,051.45		29.84	
Operating steamship line, Atlantic service.....	90,220.95	81,212.45	9,008.50		11.09	
Joint railroad and steamship expenses.....	50,124.61	44,580.89	5,543.72		12.44	
Panama Railroad Steamship Line, Pacific service.....		3.60		\$ 0		100.00
Total expenses.....	214,599.82	183,000.75	31,599.07		17.28	
Earnings over expenses.....	191,926.13	143,319.03	48,607.10		33.92	
Fixed charges.....	12,755.54	11,755.54				
Profit.....	179,170.59	131,563.49	47,607.10		36.21	

* Debit.

S. Dec. 420,504.18

Comparative statement of earnings and expenses for month of December, 1904.

EARNINGS

	1904	1903	Increase.	Decrease.
Colon to Panama:				
Freight.....	\$68,955.01	\$64,976.68	\$3,978.33	
Treasure.....	1,126.97	591.74	535.23	
Mails.....	6,897.99	4,993.93	1,903.99	
Extra baggage.....	1,257.89	678.58	579.31	
Passengers.....	3,321.36	2,901.94	419.42	
Total.....	81,559.15	74,142.87	7,416.28	
Panama to Colon:				
Freight.....	44,318.95	37,159.80	7,059.13	
Treasure.....	98.40	1,226.83		\$243.43
Mails.....	654.62	400.65	253.97	
Extra baggage.....	1,054.09	578.65	475.44	
Passengers.....	2,298.11	2,287.48		10.63
Total.....	49,178.55	41,653.41	7,525.14	
Total earnings of railroad	126,737.70	115,796.28	11,941.42	
Panama Railroad Steamship Line:				
Freight.....	69,378.00	71,973.02		2,595.02
Treasure.....	1,206.70	388.79	748.41	
Mails.....	10,401.86	8,705.44	1,696.42	
Extra baggage.....	236.70	174.84	61.86	
Passengers.....	18,620.14	10,933.58	7,686.56	
Wines and liquors				
Sold.....	\$709.80			
Purchased.....	243.17			
Miscellaneous				
Sold.....	164.38		156.20	
Purchased.....	87.38		80.71	
Total.....	100,505.45	92,097.67	8,407.78	
Joint railroad and steamship receipt:				
Interest and exchange.....	24,120.66	14,094.41	10,026.25	
Lighterage.....	1,909.89	3,745.41		1,835.52
Water supply & shipping.....	1,445.13	1,732.59		287.46
Rental of property.....	1,888.35	1,988.77		100.42
Wharfage and light..... Colon	4,806.50	3,653.70	1,152.80	
Wharfage, Panama and La Boca.....	19,269.84	18,667.77	602.07	
Crane earnings, La Boca.....	2,184.50	2,309.10		124.60
Storage and freight handling.....	41,131.37	51.54	41,079.83	
Telegraph.....	965.25	709.95	255.30	
Miscellaneous.....	252.04	1,016.99		764.95
Ballast.....	2.26			2.26
Profit on coal and material.....	89,830.85	19,411.41	70,419.44	
Earnings of machine shops.....	45,040.44	3,000.00	42,040.44	
Total.....	71,172.099	28,000.00	43,172.099	
Total earnings.....	106,505.45	92,097.67	14,407.78	

EXPENSE

Operating expenses of railroad:				
Freight, passenger, mail, and baggage.....	\$1,472.24	\$3,449.11	\$2,026.12	
Coal and fuel.....	87.21	28.00	59.21	
Maintenance of equipment.....	1,139.75	58,361.11	1,030.25	
Maintenance of buildings and structures.....	11,169.06	9,243.74	1,925.32	
Total.....	74,274.26	57,202.81	17,071.45	
Interest on Panama Railroad Steamship Line:				
Steamship expenses.....	58,623.90	49,173.41	9,450.49	
Freight, passenger, mail, and baggage.....	3,250.00	750.00	2,500.00	
Agents' expenses.....	9,189.55	8,234.41	955.13	
Cost of maintenance.....	19,087.50	22,087.50		\$3,000.00
Total.....	89,220.95	80,245.32	8,975.63	
Interest on Panama Railroad Steamship Line.....				
San Francisco Steamship Line.....				
Joint railroad and steamship receipt:				
Freight, passenger, mail, and baggage.....	8,000.00	9,941.77		1,941.77
Freight, passenger, mail, and baggage.....	1,102.06	909.33	192.73	
Freight, passenger, mail, and baggage.....	532.46	337.34	195.12	
Freight, passenger, mail, and baggage.....	2,655.90	5,185.62		2,529.72
Reparations of cars and sp.....				
Locomotives.....	400.00	400.00		

a Debit.

Comparative statement of earnings and expenses for month of December, 1904.—Continued.

EXPENSES—Continued.

	1904	1903	Increase.	Decrease.
Joint railroad and steamship expenses—Cont'd				
Depreciation of tugs...	\$175.00	8.00		
Depreciation of boats...	24,807.04	20,407.04	\$4,400.00	
Real estate.....	2,806.88	2,777.75	29.13	
Loading and discharging vessels at La Boca	2,992.96	2,441.51	551.45	
Drawback on Colombian produce.....		2,659.97		\$248.56
				1,019.20
Total expenses.....	30,211.88	24,580.80	5,631.08	
Charges.....	182,000.7	182,000.7		
Subsidy to Republic of Panama.....	2,083.34		2,083.34	
Subsidy to Republic of Colon.....	8,000.00	8,000.00		
Accrued interest on first mortgage.....	8,000.00	8,000.00		
Redemption of first mortgage.....	100.00	100.00		
Total.....		1,000.00		1,000.00

Comparative statement of earnings and expenses for month of December, 1904—Continued.

EXPENSES

	1904.	1903.	Increase.	Decrease.
Operating expenses of railroad:				
General expenses on Isthmus.....	\$48,744.17	\$41,356.41	\$7,387.76	
Conducting transportation.....	413,830.41	338,303.93	75,526.48	
Maintenance of equipment.....	131,485.17	113,765.69	17,719.48	
Maintenance of way and structures.....	132,979.49	98,814.16	64,165.33	
Total.....	727,039.24	592,240.19	164,799.05	
Panama Railroad Steamship Line:				
Steamer expenses.....	629,128.67	519,298.10	109,830.57	
Replacement of boilers and special repairs to steamers.....	24,523.20	6,750.00	17,773.20	
Agency expenses.....	103,236.05	105,204.52		\$1,978.47
Charter of steamers.....	201,482.03	234,104.17		32,622.14
Expenses steamer Advance out of commission.....		3,676.07		3,676.07
Expenses steamer Finance out of commission.....		3,220.92		3,220.92
Total.....	958,359.95	872,253.78	86,106.17	
Panama Railroad Steamship Line (Panama San Francisco):				
Steamer expenses.....	236.22	1,601.46		1,365.24
Joint railroad and steamship expenses:				
General expenses.....	93,722.63	95,257.09		1,534.46
Foreign agency expenses.....	9,088.83	10,745.24		1,656.41
Losses on cargo.....	10,863.59	12,200.50		1,337.31
Lightage.....	77,469.87	8,748.11	68,721.76	
Replacement of boilers and special repairs to tugs.....	1,800.00	1,800.00		
Depreciation of tugs.....	2,100.00	2,100.00		
Docks and wharves.....	93,579.78	98,111.17		4,531.39
Real estate.....	35,206.60	24,773.74	10,432.86	
Loading and discharging vessels at La Boca.....	22,669.18	15,834.02	6,835.16	
Drawback on Colombian produce.....	10,578.42	21,930.13		11,351.71
Total.....	379,888.15	324,242.76	55,645.39	
Total expenses.....	1,337,248.19	1,200,736.74	136,511.45	
Fixed charges:				
Subsidy to Republic of Panama.....	25,000.00		25,000.00	
Subsidy to Republic of Colombia.....	25,000.00	250,000.00		225,000.00
Accrued interest on first-mortgage bonds.....	91,360.62	102,145.60		10,784.98
Redemption of first-mortgage bonds.....	50,000.00	150,000.00		100,000.00
Total.....	391,360.62	502,145.60		110,784.98
Total expenses and fixed charges.....	1,728,608.81	1,702,882.34	25,726.47	

Details of earnings, Colon to Panama, month of December, 1904.

FREIGHT.

	1904.	1903.	Increase.	Decrease.
Through:				
From New York.....	\$ 1,111.11		1,111.11	
From New Orleans.....	1,111.11		1,111.11	
From Europe.....	8,649.15	8,680.00		27.85
Total.....	10,871.37	8,680.00	2,191.37	
Local:				
Commercial.....	2,010.15	8,671.15		6,661.00
Panama Canal Company's freight.....	2,360.15	16,111.11		13,750.96
Total.....	4,370.30	24,782.26		20,411.96
Total freight.....	15,241.67	33,462.26		18,220.59

* Isthmian Canal Commission.

Details of earnings, Colon to Panama, month of December, 1904—Continued.

FREIGHT—Continued.

	Tonnage			Rate per ton.	
	1904.	1903.	1902.	1904.	1903.
Through					
From New York	\$2,478.00	\$2,700.00	\$2,744.67	\$3.73	\$3.70
From New Orleans	1,100.00	888.00	1,000.00	3.60	3.60
From Europe	1,100.00	888.00	1,000.00	3.60	3.60
Total	4,678.00	4,476.00	4,744.67	3.65	3.65
Local					
Commercial	1,000.00	1,000.00	1,000.00	4.00	4.04
Panama Canal Company's freight	1,000.00	1,000.00	1,000.00	4.00	4.04
Total	2,000.00	2,000.00	2,000.00	4.00	4.04
Total	6,678.00	6,476.00	6,744.67	3.65	3.65

MAILS

Details of earnings, Colon to Panama, month of December, 1904.—Continued.

PASSENGERS.

	Number.			Earnings.			
	1904.	1903.	In-crease.	De-crease.	1904.	1903.	Increase. Decrease.
From New York:							
First class.....	157	60	97		\$1,219.84	\$549.00	\$670.84
Second class.....	57	51	6		273.75	245.00	28.75
From Europe:							
First class.....	62	61	1		617.08	604.40	12.59
Second class.....	61	11	50		276.79	36.82	239.97
Local:							
First class.....	2,856	95	2,761		41,667.83	329.75	\$14,997.58
Second class.....	5,800	2,776	3,024		2,601.73	1,136.88	1,464.85
Total.....	8,933	3,054	5,879		3,321.36	2,901.94	419.42

* Debit

Details of earnings, Colon to Panama, for twelve months ending December 31, 1904.

FREIGHT.

	Tonnage			
	1904.	1903.	Increase.	Decrease
Through:				
From New York	93,157.1	76,030.2	17,126.9	
From New Orleans	1,571.1	1,571.1		
From Europe.....	82,907.1	61,880.1	21,027.0	
Total.....	177,635.3	137,911.4	39,723.9	
Local:				
Commercial.....	26,036.3	22,177	3,859.3	
Panama Canal Co.	13,312.1	2,211.3	11,100.8	
Company's freight	17,344.1	24,844.1		7,500.0
Total.....	56,692.5	49,232.4	7,460.1	
Total freight	234,327.8	187,143.8	47,184.0	

	Earnings.			Rate per ton.	
	1904.	1903.	Increase. Decrease.	1904.	1903.
Through:					
From New York	\$333,631.10	\$258,871.1	\$74,759.99	\$7.58	\$3.46
From New Orleans	7,440.02	7,440.02		4.73	
From Europe.....	166,734.52	248,770.1	82,035.59	3.82	4.02
Total.....	507,805.64	515,081.23	7,275.59	3.79	3.68
Local:					
Commercial.....	26,036.3	22,177	3,859.3	4.07	3.76
Panama Canal Co.	13,312.1	2,211.3	11,100.8	1.83	3.04
Company's freight	17,344.1	24,844.1	7,500.0		3.00
Total.....	140,248.74	99,765.99	40,482.75	2.47	2.03
Total freight.	798,054.38	697,614.99	100,439.39	3.41	3.00

* Isthmian Canal Commission from May 4.

MAILS.

	Weight.				Earnings.			
	1904.	1903.	Increase.	Decrease.	1904.	1903.	Increase.	Decrease.
From New York...	740,532	562,899	177,633		\$92,335.18	\$31,409.90	\$60,925.28	
From Europe.....	179,796	186,128		6,332	14,890.16	15,703		\$772.87
Local.....	234,868	190,950	43,918		4,761.76	3,48	1,359.28	
Total.....	1,155,196	939,977	215,219		81,987.10	50,620.41	31,690.69	

Details of earnings, Colon to Panama, for twelve months ending December 31, 1904—Cont'd.

TREASURE.

	Value.				Earnings.			
	1904.	1903.	Increase.	De-crease.	1904.	1903.	Increase.	De-crease.
From New York...	\$1,291,156	\$107,266	\$1,183,890		\$3,004.33	\$462.32	\$2,542.01	
From Europe.....	2,240,232	2,309,657		\$156,425	7,443.27	7,357.12	86.15	
Local:								
Commercial.....	151,866	45,183	106,683		207.93	77.54	130.39	
Panama Canal.	2,443	3,333		890	1.22	4.00		\$2.78
Total.....	3,685,697	2,552,439	1,133,258		10,656.75	7,900.98	2,755.77	

BAGGAGE.

	Weight.				Earnings.			
	1904.	1903.	Increase.	De-crease.	1904.	1903.	Increase.	De-crease.
From New York...	88,967	56,766	32,201		\$1,618.15	\$1,027.22	\$590.93	
From Europe.....	42,398	41,657	741		1,271.94	1,240.71	22.23	
Local.....	337,489	264,986	72,503		8,054.17	6,218.71	1,835.46	
Total.....	468,854	363,409	105,445		10,944.26	8,485.64	2,448.62	

PASSENGERS.

	Number.				Earnings.			
	1904.	1903.	Increase.	De-crease.	1904.	1903.	Increase.	De-crease.
From New York:								
First class.....	1,221	773	448		\$10,755.81	\$6,900.31	\$3,855.50	
Second class....	607	412	195		2,888.65	1,983.75	904.90	
From Europe:								
First class.....	525	546		21	4,857.40	4,994.06		\$136.66
Second class....	318	130	218		1,612.49	630.63	981.86	
Local:								
First class.....	7,480	967	6,483		9,591.97	3,305.41	6,286.56	
Second class....	6,985	34,654	11,331		22,776.56	14,944.90	7,831.64	
Total.....	17,512	37,512	18,654		52,482.88	32,759.08	19,723.80	

Details of earnings, Panama to Colon, month of December, 1904.

FREIGHT.

	Tonnage.			
	1904.	1903.	Increase.	Decrease.
Through:				
To New York.....	5,568	5,605		962
To Europe.....	5,192	4,655	537	
Total.....	11,761	10,260	1,501	
Local:				
Commercial—				
La Boca-Panama.....	1,037	977	60	
Panama-Colon.....	250	442		191
Panama Canal Co.....	4,735	12	723	
Company's freight.....	619	563	56	
Total.....	2,642	1,695	947	
Total freight.....	14,404	11,956	2,447	

* Isthmian Canal Commission.

REPORT OF JOSEPH L. BRISTOW.

Details of earnings, Panama to Colon, month of December, 1904—Continued.

FREIGHT—Continued.

	Earnings.				Rate per ton.	
	1904.	1903.	Increase.	Decrease.	1904.	1903.
Through:						
To New York.....	\$20,183.94	\$15,448.43	\$4,735.51		\$3.07	\$2.76
To Europe.....	21,628.71	19,027.51	2,601.20		4.17	4.00
Total.....	41,812.65	34,475.94	7,336.71		3.56	3.36
Local:						
Commercial—						
La Boca-Panama.....	534.49	337.77	196.72		.51	.50
Panama-Colon.....	1,981.23	1,071.25	909.98		7.91	4.46
Panama Canal Co.....	381.21	157.44	223.77		518.65	12.40
Company's freight.....	251.77	217.40	34.37		.41	.39
Total.....	2,406.28	2,683.86		277.58	.91	1.58
Total freight.....	44,218.93	37,159.80	7,059.13		3.07	3.11

^a Debit account adjustment of business of previous months on basis of 50 per cent of former rates.

MAILS.

	Weight.				Earnings.			
	1904.	1903.	Increase.	Decrease.	1904.	1903.	Increase.	Decrease.
To New York.....	8,718	6,683	2,035		\$454.06	\$331.91	\$122.15	
To Europe.....	758	704	54		75.48	67.24	8.24	
Local.....	1,201		1,201		124.38	1.50	122.98	
Total.....	10,677	7,387	3,290		654.02	400.65	253.37	

TREASURE.

	Value.				Earnings.			
	1904.	1903.	Increase.	Decrease.	1904.	1903.	Increase.	Decrease.
To New York.....	\$66,973	\$58,362	\$8,611		\$245.94	\$229.11	\$16.83	
To Europe.....	241,940	350,334		\$108,394	763.93	974.45		\$210.52
Local:								
Commercial.....	1,000	8,686		7,686	1.50	13.61		11.51
Panama Canal.....	60,000	20,522	39,478		27.97	10.26		38.23
Total.....	369,913	437,598		67,685	983.10	1,226.83		243.43

BAGGAGE.

	Weight.				Earnings.			
	1904.	1903.	Increase.	Decrease.	1904.	1903.	Increase.	Decrease.
To New York.....	1,705	1,335	370		\$31.94	\$25.19	\$6.75	
To Europe.....	41,675	20,205	21,470		1,022.15	553.46	468.69	
Total.....	43,380	21,540	21,840		1,054.09	578.65	475.44	

PASSENGERS.

	Number.				Earnings.			
	1904.	1903.	Increase.	Decrease.	1904.	1903.	Increase.	Decrease.
To New York:								
First class.....	47	41	6		\$377.83	\$377.68	\$0.15	
Second class.....	85	62	23		536.25	306.25	230.00	
To Europe:								
First class.....	5	11		6	49.08	167.93		\$118.85
Second class.....	11	2	9		55.00	10.00	45.00	
Local:								
First class.....	3,043	82	2,961		1,527.07	253.23		1,780.30
Second class.....	3,911	3,078	833		2,777.02	1,172.39	1,604.63	
Total.....	9,102	3,276	5,826		2,268.11	2,287.48		19.37

^a Debit.

Details of earnings, Panama to Colon, for twelve months ending December 31, 1904.

FREIGHT.

	Tonnage.			
	1904.	1903.	Increase.	Decrease.
Through:				
To New York.....	74,198 ¹ / ₂	71,940 ¹ / ₂	2,258 ¹ / ₂	
To Europe.....	85,485 ¹ / ₂	71,575 ¹ / ₂	13,909 ¹ / ₂	
Total.....	159,683 ¹ / ₂	143,515 ¹ / ₂	16,168 ¹ / ₂	
Local:				
Commercial:				
La Boca-Panama.....	8,855 ¹ / ₂	6,653 ¹ / ₂	2,201 ¹ / ₂	
Panama-Colon.....	2,429 ¹ / ₂	3,485 ¹ / ₂		1,056 ¹ / ₂
Panama Canal Company.....	1,192 ¹ / ₂	24 ¹ / ₂	1,967 ¹ / ₂	
Company's freight.....	6,306 ¹ / ₂	7,885 ¹ / ₂		1,578 ¹ / ₂
Total.....	19,584 ¹ / ₂	18,049 ¹ / ₂	1,534 ¹ / ₂	
Total freight.....	179,268 ¹ / ₂	161,565 ¹ / ₂	17,703 ¹ / ₂	

	Earnings.				Rate per ton.	
	1904.	1903.	Increase.	Decrease.	1904.	1903.
Through:						
To New York.....	\$206,284.18	\$210,010.98	\$3,726.80		\$2.78	\$2.02
To Europe.....	312,516.33	264,168.17	\$48,348.16		3.69	3.69
Total.....	518,800.51	474,179.15	44,621.36		3.25	3.30
Local:						
Commercial:						
La Boca-Panama.....	4,521.10	3,298.05	1,223.05		.51	.50
Panama-Colon.....	19,632.68	19,456.73	175.95		8.08	5.58
Panama Canal Company.....	1,542.70	220.19	1,322.51		.77	8.85
Company's freight.....	2,529.53	2,856.17		326.64	.40	.36
Total.....	28,226.01	25,831.14	2,394.87		1.44	1.43
Total freight.....	547,026.52	500,010.29	47,016.23		3.05	3.09

a Isthmian Canal Commission, from May 4.

Details of earnings, Panama to Colon, for twelve months ending December 31, 1904.

MAILS.

	Weight.				Earnings.			
	1904.	1903.	Increase.	Decrease.	1904.	1903.	Increase.	Decrease.
To New York.....	91,990	78,932	13,058		\$4,625.45	\$4,414.23	\$211.22	
To Europe.....	9,465	6,956	2,509		925.95	741.17	184.78	
Local.....	1,423	14	1,409		149.06	23.50	125.56	
Total.....	102,878	85,902	16,976		5,700.46	5,178.90	521.56	

TREASURE.

	Value.				Earnings.			
	1904.	1903.	Increase.	Decrease.	1904.	1903.	Increase.	Decrease.
To New York.....	\$1,908,442	\$942,212	\$156,230		\$4,183.35	\$3,754.14	\$429.21	
To Europe.....	2,752,383	3,907,770		\$1,155,387	8,010.77	11,046.71		
Local:								
Commercial.....	57,451	119,853		62,402	124.86	183.40		\$58.54
Panama Canal.....	401,370	304,986	96,384		129.84	153.38		23.54
Total.....	4,309,646	5,274,821		965,175	12,448.82	15,137.63		2,688.81

Details of earnings, Panama to Colon, for twelve months ending December 31, 1904—Cont'd

BAGGAGE.

	Weight.				Earnings.			
	1904.	1903.	In-crease.	Decrease.	1904.	1903.	Increase.	De-crease.
To New York.....	36,886	23,801	13,025	.....	\$661.52	\$457.59	\$233.03	.....
Local.....	319,509	243,639	75,870	.....	8,001.83	7,056.84	1,544.99	.....
Total.....	356,395	267,440	88,895	.....	9,293.35	7,514.43	1,778.92	.....

PASSENGERS.

	Number.				Earnings.			
	1904.	1903.	In-crease.	Decrease.	1904.	1903.	Increase.	De-crease.
To New York:								
First class.....	1,062	819	243	.....	\$9,255.02	\$7,441.36	\$1,813.66	.....
Second class.....	1,099	862	247	.....	5,475.83	4,161.25	1,314.58	.....
To Europe:								
First class.....	176	187		11	1,540.74	1,663.69	.....	\$122.95
Second class.....	140	77	63	.....	653.15	381.25	271.90	.....
Local:								
First class.....	7,829	1,314	6,515	.....	9,488.81	3,809.21	5,679.60	.....
Second class.....	47,318	37,104	10,214	.....	22,328.70	15,205.80	7,122.90	.....
Total.....	57,624	40,353	17,271	.....	48,742.34	32,062.50	16,679.78	.....

Expenses in detail.

GENERAL EXPENSES, ISTHUS AGENCY.

Subaccounts.	1904. month of December.	1903. month of December.	1904, 12 months to December 31.	1903, 12 months to December 31.
101. Advertising.....			\$30.94	\$7.63
102. Clerks and attendants, salaries of.....	\$1,529.41	\$1,015.87	13,424.47	12,111.21
103. Cablegrams.....	227.01	52.16	921.30	467.7
104. Hospital service.....	1,170.89	622.01	11,047.51	9,225.95
105. Incidentals.....	155.02		879.58	62.05
106. Legal expenses.....	266.00	238.45	3,248.71	1,837.70
107. Miscellaneous.....	886.32	415.91	4,806.75	4,001.06
108. Officers, salaries of.....	950.00	900.00	11,248.99	11,062.94
109. Office expenses and supplies.....	200.03	139.60	1,727.24	1,385.17
110. Stationery and printing.....	87.55	65.11	1,408.68	1,164.97
Total.....	5,472.23	3,440.11	48,744.17	41,356.41

CONDUCTING TRANSPORTATION.

115. Advertising.....	\$127.00	\$105.83	\$1,439.56	\$1,273.96
116. Clearing wrecks.....			53.03	27.47
117. Engineers and firemen.....	3,280.03	2,466.82	32,477.40	28,685.87
118. Fuel for locomotives.....	4,760.06	3,712.73	45,109.65	38,378.50
119. Freight agent and clerks, Colon.....	1,661.80	1,329.57	18,792.03	17,368.7
120. Freight agent and clerks, Panama and La Boea.....	2,397.71	2,439.02	30,293.68	29,001.14
121. Injuries to persons.....			402.64	154.75
122. Incidentals.....	56.10	42.33	680.39	535.27
123. Labor, Colon station.....	6,699.60	3,424.10	63,862.96	42,771.54
124. Labor, Panama station and La Boea.....	6,443.11	4,591.09	77,448.74	60,062.7
125. Oil, tallow and waste.....	166.91	140.65	1,772.34	1,392.00
126. Other supplies for locomotives.....	142.66	79.79	1,166.54	684.1
127. Roundhouse men.....	581.91	588.92	7,255.55	7,100.48
128. Superintendence and clerks.....	346.00	356.40	4,104.24	4,253.62
129. Switchmen, yardmen, and yard watchmen.....	4,386.65	3,407.91	48,941.03	41,235.7
130. Station agents and clerks.....	1,290.32	1,564.55	15,871.63	16,715.51
131. Station supplies and expenses.....	1,077.94	1,374.33	17,051.00	11,117.05
132. Stationery and printing.....	328.97	255.13	4,764.88	3,324.65
133. Train conductors, baggage-men, flagmen, and brakemen.....	2,341.86	1,562.56	21,633.18	16,498.59
134. Train supplies and expenses.....	334.04	206.98	4,294.49	3,262.95
135. Telegraph expenses.....	962.50	585.05	10,500.77	8,825.30
136. Water supply for locomotives.....	440.18	291.58	4,644.16	4,578.65
137. Rent of buildings, etc.....	66.96	46.93	1,269.52	1,055.99
Total.....	37,832.21	28,772.27	413,830.41	338,303.93

150. Freight
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170. Bridges
171. General
172. Incident
173. Machin
174. Rails, re
175. Roadway
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178. Switches
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Total..

Expenses in detail—Continued.

MAINTENANCE OF EQUIPMENT.

Subaccounts.	1904, month of December.	1903, month of December.	1904, 12 months to December 31.	1903, 12 months to December 31.
150. Freight cars, repairs and renewals of.....	\$5,680.18	\$6,076.06	\$4,387.85	\$44,533.87
152. Locomotives, repairs and renewals of.....	10,491.73	9,655.92	46,157.11	36,701.97
153. Passenger cars, repairs and renewals of.....	1,710.16	1,101.29	11,489.56	12,571.57
154. Superintendence and clerks.....	1,198.38	1,032.65	12,445.73	11,545.06
155. Stationery and printing.....	11.52	9.95	244.30	227.72
156. Shop expenses.....	90.83	51.67	734.04	740.66
157. Shop, machinery, and tools, repairs and renewals of.....	555.42	408.08	8,972.48	5,259.34
158. Work cars, repairs and renewals of.....	23.55	404.90	1,034.57	2,124.00
Total.....	19,770.77	18,740.52	131,485.17	113,765.09

Expenses in detail—maintenance of way and structures.

Subaccounts.	1904, month of December.	1903, month of December.	1904, 12 months to December 31.	1903, 12 months to December 31.
170. Bridges and culverts, repairs and renewals of..	\$638.18	\$1,605.30	\$10,208.14	\$8,428.52
171. General offices, repairs and renewals of....	120.29	20.76	1,514.10	207.29
172. Incidentals.....	24.42	4.07	117.47	202.50
173. Machinery and tools, repairs and renewals of..	351.39	82.37	2,000.93	1,424.68
174. Rails, renewals of.....	3,558.41	10.43	18,385.21	98.35
175. Roadway and track, repairs of.....	9,537.96	1,750.92	26,941.65	21,263.44
176. Road crossings, signs, and cattle guards, repairs and renewals of.....			48.09	26.08
177. Superintendence and clerks.....	767.02	753.50	8,791.33	8,621.19
178. Switches and frogs, renewals of.....	936.68	129.74	2,014.25	1,085.64
179. Spikes and rail fastenings, renewals of.....	255.57	66.49	4,960.58	1,072.38
180. Station buildings, repairs and renewals of.....	2,476.60	390.67	22,240.09	4,075.57
181. Shop buildings, water and fuel stations, repairs and renewals of.....	1,537.91	901.47	17,725.87	16,449.18
182. Stationery and printing.....	33.53	5.24	332.26	145.35
183. Section houses, tool houses, etc., repairs and re- newals of.....			84.35	59.14
184. Ties, renewals of.....	43.79	220.12	11,672.21	1,234.72
185. Telegraph, repairs and renewals of.....	135.35	220.94	2,378.26	2,866.21
186. Weeds, brush, grass, etc., removal of.....	857.87	64.19	3,564.70	1,570.45
Total.....	11,199.05	6,240.91	132,979.49	68,814.16

a Credits.

Panama Railroad Steamship Line, tonnage and passengers carried.

Month of December.

	Ships.	1904.	Ships.	1903.	Ships.	Increase.	Ships.	Decrease.
TONNAGE.								
Panama Railroad ships:								
Arrived.....	2	2,371	1	1,432	1	939		
Sailed.....	2	4,227	1	1,787	1	2,440		
Chartered passenger ships:								
Arrived.....	2	3,413	3	5,125			1	1,712
Sailed.....	3	5,623	4	6,655			1	1,032
Total.....	9	15,634	9	14,999		635		
PASSENGERS.								
Panama Railroad ships:								
Arrived.....	2	71	1	31	1	40		
Sailed.....	2	122	1	28	1	94		
Chartered ships:								
Arrived.....	2	100	3	105			1	5
Sailed.....	3	165	4	132		33	1	
Total.....	9	458	9	296		162		

Panama Railroad Steamship Line, tonnage and passengers carried—Continued.

	Twelve months to December 31.							
	Ships.	1904.	Ships.	1903.	Ships.	Increase.	Ships.	Decrease.
TONNAGE.								
Panama Railroad ships:								
Arrived.....	24	34,798	14	20,707	10	14,091		
Sailed.....	25	48,670	13	20,553	12	28,117		
Chartered passenger ships:								
Arrived.....	30	41,402	36	55,275			6	13,873
Sailed.....	30	58,930	37	61,774			7	2,844
Total.....	109	183,800	100	158,309	9	25,491		
PASSENGERS.								
Panama Railroad ships:								
Arrived.....	23	1,167	14	712	9	455		
Sailed.....	24	1,355	13	384	11	971		
Chartered ships:								
Arrived.....	30	1,738	36	1,554		184	6	
Sailed.....	30	1,425	37	1,165		260	7	
Total.....	107	5,685	100	3,815	7	1,870		

Expenses in detail.

STEAMER EXPENSES, PANAMA RAILROAD STEAMSHIP LINE.

Subaccounts.	New York.	Colon.	1904, month of Decem- ber.	1903, month of December.	1904, 12 months to December 31.	1903, 12 months to December 31.
2. Custom-house and port charges.....	\$128.03	\$340.12	\$212.09	\$1,013.51	\$5,753.08	\$13,823.58
3. Docking.....					120.45	149.25
4. Equipment, deck department.....	633.62		633.62	85.47	7,712.64	1,713.55
5. Equipment and spare machinery, engine department.....	40.01		40.01	20.75	1,584.18	308.67
6. Equipment, commissary department.....	169.39		169.39	56.87	11,890.54	1,037.51
7. Fuel.....	10,895.20	291.25	11,186.45	12,148.42	121,826.66	117,375.47
8. Feeding passengers and crew.....	7,657.47	206.53	7,864.00	7,221.34	86,100.13	66,725.89
9. Incidentals.....	268.76	1.75	270.51	589.92	2,032.66	2,629.95
10. Injuries to persons.....	47.40	38.24	85.64	34.61	622.39	889.23
11. Labor on cargo.....	9,597.56	6,447.81	16,045.37	11,265.56	135,700.59	105,660.53
12. Labor on coal.....	1,569.95	9.50	1,578.95	1,372.98	14,792.78	13,023.69
13. Labor on ashes.....	53.00		53.00	94.50	1,137.70	1,206.50
14. Loss on damage.....	116.19	94.66	210.85	514.37	3,850.41	5,449.15
15. Oil and waste.....	254.47	92.10	346.57	271.26	2,815.71	2,376.68
16. Painting ship's bottom.....	540.00		540.00		998.60	545.50
17. Pilotage and towage.....	867.06		867.06	900.66	8,887.85	7,816.03
18. Quarantine.....	40.00		40.00	75.00	660.00	797.50
19. Repairs, deck department.....	898.68	62.85	961.53	134.62	8,507.76	4,631.44
20. Repairs, engine department.....	2,568.52	88.16	2,656.68	489.43	16,511.61	11,070.32
21. Repairs, commissary department.....	135.16	11.22	146.41	73.55	3,464.79	797.68
22. Stores, deck department.....	605.33		605.33	221.91	5,573.53	3,254.81
23. Stores, engine department.....	196.86		196.86	144.89	3,955.45	2,338.55
24. Stores, commissary department.....	202.70	9.87	212.57	172.71	2,420.58	1,865.94
25. Stores, surgeon's department.....	39.41		39.41	21.72	366.74	380.14
26. Stationery and printing.....	36.28	2.72	39.00	100.58	1,061.76	756.57
27. Telegrams and cables.....	21.66	40.36	62.02	37.09	933.22	925.17
28. Wages.....	9,896.84		9,896.84	10,932.91	144,454.54	131,273.92
29. Water.....		1,400.25	1,400.25	1,121.73	14,914.10	9,352.35
30. Washing.....	358.91	18.21	377.12	322.09	4,028.93	3,044.09
31. Insurance.....	1,956.37		1,956.37	699.08	16,379.29	8,075.44
Total.....	49,538.80	9,155.10	58,693.90	50,137.53	629,128.67	519,298.10

* Credits.

Expenses in detail—Continued.

AGENCY EXPENSES, PANAMA RAILROAD STEAMSHIP LINE.

Subaccounts.	New York.	Colon.	1904, month of Decem- ber.	1903, month of December.	1904, 12 months to December 31.	1903, 12 months to December 31.
50. Advertising, newspapers.....	\$22.50	\$79.25	\$101.75	\$218.94	\$2,602.54	\$2,613.98
51. Buildings, docks, and wharves, repairs and rent of	2,069.79	1,505.00	3,574.79	3,274.69	40,752.19	45,820.76
52. Buildings, docks, and wharves, other expenses.....	456.59	155.39	611.98	398.43	6,376.43	5,844.44
55. Insurance.....					1,164.75	1,606.75
56. Injuries to persons.....						1.50
57. Incidentals.....					57.35	55.00
58. Labor, general.....	1,632.40	31.50	1,713.90	1,427.25	17,148.75	15,360.82
59. Legal services and expenses.....					5.00	
60. Loss and damage.....	4.63	5.40	10.93		10.53	83.85
61. Salaries of agents and clerks.....	2,270.50	519.20	2,789.70	2,652.35	31,209.25	31,138.57
62. Stationery and printing.....	282.54		282.54	176.37	2,693.90	1,616.57
63. Telegrams and cables.....	4.86		4.86	6.05	83.14	52.26
64. Taxes.....		100.00	100.00	83.34	1,122.22	1,000.02
Total.....	6,793.81	2,395.74	9,189.55	8,237.42	103,226.05	105,204.52

GENERAL EXPENSES, NEW YORK.

Subaccounts.	1904, month of Decem- ber.	1903, month of Decem- ber.	1904, 12 months to December 31.	1903, 12 months to December 31.
80. Advertising folders and posters.....	\$0.30	\$3.15	\$541.54	\$259.22
81. Advertising, general.....		41.10	264.70	335.16
82. Clerks, salaries of.....	1,939.99	1,730.93	20,478.08	18,811.86
83. Directors' and committees' fees.....	810.00	985.00	9,730.00	10,325.00
84. General offices, repairs and rent of.....	305.55	305.56	3,666.60	3,600.01
85. General offices, other expenses.....	337.71	202.17	2,576.99	2,415.00
86. Incidentals.....	207.50	471.65	1,962.99	1,525.75
87. Legal services and expenses.....	1,525.45	1,999.33	8,193.35	10,919.48
88. Officers, salaries of.....	3,268.33	3,218.33	39,084.99	38,635.00
89. Stationery and printing.....	186.05	113.80	1,326.90	1,215.11
90. Telegrams and cables.....	238.17	323.08	2,015.93	1,390.41
Total.....	8,869.05	9,394.10	89,842.07	89,432.00

GENERAL EXPENSES, EUROPEAN DEPARTMENT, NEW YORK.

Subaccounts.	1904, 12 months to December 31.	1903, 12 months to December 31.
82. Clerks, salaries of.....	\$88.37	\$29.77
85. General offices, other expenses.....	.97	11.62
88. Officers, salaries of.....	458.33	3,666.67
89. Stationery and printing.....		5.25
90. Telegrams and cables.....		93.90
Total.....	547.67	3,880.56

AGENCY EXPENSES.

Subaccounts.	San Fran- cisco agency expenses.	Foreign agency expenses.	1904, month of De- cember.	1903, month of De- cember.	1904, 12 months to De- cember 31.	1903, 12 months to De- cember 31.
51. Buildings, docks, and wharves, other expenses.....	\$33.05		\$33.05	\$28.25	\$181.17	\$264.65
52. Buildings, docks, and wharves, re- pairs and rent of.....	40.00		40.00	50.00	480.00	575.00
53. Commissions, passengers.....		\$201.08	201.08	114.39	1,879.86	1,202.17
57. Incidentals.....		306.80	306.80	5.40	864.55	621.00
59. Legal services and expenses.....	50.00		50.00	100.00	50.00	200.00
61. Salaries of agents and clerks.....	215.00	250.00	465.00	606.10	5,470.59	7,811.10
62. Stationery and printing.....	5.75		5.75	5.35	77.22	35.85
63. Telegrams and cables.....	.98		.98	.04	84.59	35.47
64. Taxes.....					.85	
Total.....	344.78	757.88	1,102.66	909.53	9,088.83	10,745.24

Expenses in detail—Continued.

LIGHTERAGE EXPENSES.

Subaccounts.	1904, month of Decem- ber.	1903, month of Decem- ber.	1904, 12 months to December 31.	1903, 12 months to December 31.
200. Fuel and water.....	\$739.04	\$557.06	\$7,695.41	\$8,459.74
202. Incidentals.....		15.00		15.00
203. Labor on cargo, Panama.....	858.85	676.71	12,557.76	7,064.15
204. Labor on cargo, Isla de Naos.....	209.77	13.08	2,336.31	888.54
206. Lighters, repairs and renewals of.....	2,091.79	775.07	25,681.45	2,378.70
207. Other lighterage equipment, repairs and renew- als of.....	819.89	310.13	6,513.00	2,842.34
208. Supplies.....	386.65	43.60	3,715.53	454.07
209. Superintendence and clerks.....	175.00	275.00	3,077.14	3,290.32
210. Subsistence tugs.....	186.00	160.00	2,064.66	1,844.59
211. Subsistence laborers, Isla de Naos.....			873.52	45.00
212. Tugs, repairs and renewals of.....	1,528.90	1,747.97	5,327.82	3,596.44
213. Tugs, expenses while out of commission.....		33.90	637.70	447.39
214. Wages of crews.....	663.31	567.50	6,929.57	6,771.89
Total.....	7,655.90	5,185.62	77,409.87	38,148.17

DOCKS AND WHARVES.

220. Docks and wharves, Colon, repairs and renewals of.....	\$866.14	\$224.95	\$9,738.33	\$13,505.98
221. Docks and wharves, Panama, repairs and renew- als of.....	19.29	102.85	12,371.20	5,971.22
222. Harbor master and light-house keeper.....	72.50	79.25	876.45	884.51
224. Light-house, supplies.....	6.95	10.03	80.14	91.75
225. La Boca pier, repairs and renewals of.....	1,974.42	377.61	9,496.04	1,454.87
226. La Boca basins, dredging of.....	5,319.60	2,857.78	32,712.35	43,668.87
227. Clapets and dredges, repairs and renewals of.....	15,615.48	16,170.23	31,971.75	25,503.27
228. Buoys, repairs and renewals of.....			255.15	395.12
229. Rental of dredges, clapets, etc.....	977.56	584.90	6,088.37	6,977.68
Total.....	24,851.94	20,407.60	103,579.78	98,453.27

REAL ESTATE.

230. Colon buildings, repairs and renewals of.....	\$1,698.27	\$1,562.42	\$22,556.35	\$12,595.85
231. Colon buildings, repairs of existing furniture.....	283.50	57.31	1,943.81	1,045.05
232. Legal and other expenses.....	821.04	805.82	10,429.15	10,589.62
233. Freight on water.....	4.07		276.99	543.22
Total.....	2,806.88	2,425.55	35,206.60	24,773.74

LOADING AND DISCHARGING VESSELS AT LA BOCA.

250. Transporters, La Boca pier, fuel, water, and sup- plies.....	\$78.26	\$79.83	\$1,370.44	\$2,014.69
251. Transporters, La Boca pier, repairs and renewals of.....	1,066.02	1,497.21	9,387.57	5,275.51
252. Labor on pier.....	900.40	715.12	10,682.20	7,952.19
255. Other supplies and expenses.....			91.59	62.45
256. Expenses transferring freight, by lighters, be- tween ships lying at wharf and shore.....	48.27	49.35	1,087.38	329.18
Total.....	2,092.95	2,341.51	22,619.18	15,834.02

STEAMER EXPENSES, PACIFIC LINE.

14. Loss and damage.....		\$3.60	\$236.22	\$1,512.43
22. Stores, deck department.....				89.03
Total.....		3.60	236.22	1,601.46

EXHIBIT B 23.

Question. Tariffs of Ward Line from New York to Cuban and South American ports.

Answer. The Ward Line steamers do not run to South American ports. We submit their tariffs.

New York to Vera Cruz and Tampico, Mexico, dated October 1, 1903.

New York to Progreso, Mexico, January 2, 1905.

New York to Habana and Santiago, Cuba, their letter dated February 3. They have no printed copies of tariffs for distribution at the present time.

R. L. WALKER,
Traffic Manager.

The New York and Cuba Mail Steamship Company, Ward Line.—Freight tariff.

NEW YORK TO VERA CRUZ AND TAMPICO.

[Effective October 1, 1903. Subject to change without notice.]

Acids, carbonyl.....	each.....	\$2. 00
Acids, in iron drums.....	per 100 pounds..	. 50
Animals, cattle.....	per head.....	60. 00
Animals, horses.....	do.....	75. 00
Animals, dogs.....	do.....	10. 00
Animals, calves, in crates.....	per cubic foot..	. 25
Animals, hogs, in crates.....	do.....	. 25
Asphalt.....	per 100 pounds..	. 25
Apples.....	per barrel.....	1. 25
Barley.....	per 100 pounds..	. 30
Beer, ale, or porter, bottled.....	per cubic foot..	. 12½
Bran.....	per 100 pounds..	. 40
Brick, fire or common.....	per 1,000.....	15. 00
Cartridges.....	per 100 pounds..	1. 50
Caustic soda.....	do.....	. 25
Cement.....	do.....	. 25
Chimneys, lamp.....	per cubic foot..	. 12½
Clay, fire or common.....	per 100 pounds..	. 25
Cocoa.....	do.....	. 40
Copper ingots, pigs, and sheets.....	do.....	. 30
Corkwood.....	per cubic foot..	. 12½
Corn.....	per bushel.....	. 10
Cotton.....	per 100 pounds..	. 35
Crackers, in barrels or cases.....	per cubic foot..	. 12
Deck freight, n. o. s.....	do.....	. 25
Empty barrels.....	do.....	. 09
Flour, in barrels.....	per barrel.....	. 75
Furniture, k. d., boxed or in bundles.....	per cubic foot..	. 12½
Glassware, common.....	do.....	. 12½
Glass, window.....	per 100 pounds..	. 40
Grease, axle.....	do.....	. 30
Grease.....	do.....	. 30
Grindstones.....	do.....	. 30
Gunpowder.....	per pound.....	. 03
Hay.....	per bale.....	1. 25
Hay, compressed.....	do.....	. 70
Houses, portable.....	per cubic foot..	. 10
Iron and steel, band, bar, boiler, rod, and tank, bolts, butts, hinges, nails, nuts, rivets, screws, spikes, and washers.....	per 100 pounds..	. 30
Iron beams and girders (See Machinery.).....	do.....	. 30
Iron pipe.....	do.....	. 30
Iron pipe fittings.....	do.....	. 25
Iron, pig.....	do.....	. 25
Lamps, lanterns, and fixtures.....	per cubic foot..	. 12½
Lath and shingles.....	do.....	. 10
Lead, in pigs or sheets.....	per 100 pounds..	. 30
Lead pipe.....	do.....	. 30
Lumber, white pine.....	per 1,000 feet..	8. 00

Lumber, hardwood.....	per 1,000 feet..	\$9.00
Lard.....	per 100 pounds..	.30
Machinery, piece or package under 2,000 pounds.....	do.....	.40
Machinery, piece or package under 2/4,000 pounds.....	do.....	.50
Machinery, piece or package under 4/6,000 pounds.....	do.....	.60
Machinery, piece or package under 6/8,000 pounds.....	do.....	.75
Machinery, piece or package under 8/12,000 pounds.....	do.....	1.00
Machinery, piece or package under 12/20,000 pounds.....	do.....	1.25
Machinery, lots of 25 tons and up, pieces or packages under 2,000 pounds.....	do.....	.35

Any piece or package of the above subject to measurement will be charged at the rate of 15 cents per cubic foot, if paying ship better than weight rate.

Marble dust.....	per 100 pounds..	.30
Meat.....	per barrel..	.75
Measurement goods.....	per cubic foot..	.15
Nails.....	per 100 pounds..	.30
Oil, cotton seed, kerosene, lubricating, myrabane, and lard.....	do.....	.30
Oil, n. o. s.....	do.....	.40
Paints.....	do.....	.30
Paper stock, strawboard, in compressed bales.....	do.....	.30
Paper, straw.....	per cubic foot..	.12
Paraffin wax.....	per 100 pounds..	.30
Pianos and organs.....	per cubic foot..	.20
Pipe, earthen sewer, owners' risk.....	per 100 pounds..	.30
Pitch.....	do.....	.30
Plaster, in barrels.....	do.....	.30
Potash.....	do.....	.30
Rails and fish plates.....	do.....	.20
Rice.....	do.....	.25
Rosin.....	do.....	.30
Safes, under 2,000 pounds.....	do.....	.75
Safes, from 2/5,000 pounds.....	do.....	1.00
Safes, over 5,000 pounds.....	do.....	1.50
Salt.....	do.....	.25
Sand, in barrels.....	do.....	.25
Sewing machines.....	per cubic foot..	.12½
Shooks, box.....	do.....	.10
Soap stock.....	per 100 pounds..	.30
Soda, ash.....	do.....	.25
Specie, under \$10,000.....	per cent..	1
Specie, \$10,000 and under \$50,000.....	do.....	1
Specie, \$50,000 and under \$100,000.....	do.....	1
Specie, \$100,000 and upward.....	do.....	1½
Spikes.....	per 100 pounds..	.30
Staples.....	do.....	.30
Stearin.....	do.....	.30
Sulphur.....	do.....	.30
Tallow.....	do.....	.30
Talcum.....	do.....	.30
Tar.....	do.....	.30
Tobacco.....	do.....	.40
Trunks.....	per cubic foot..	.72
Turpentine.....	per 100 pounds..	.30
Valuation.....	per cent..	1
Varnish.....	per 100 pounds..	.30
Vegetables, not deck freight.....	do.....	.50
Weight goods, n. o. s.....	do.....	.40
Wheat, whole or crushed.....	do.....	.25
Whiting.....	do.....	.30
Wire, barb, fence, and telegraph.....	do.....	.30

In addition to above rates, 5 per cent primage to be added.

Minimum B/L, \$5.25 for Vera Cruz.

Minimum B/L \$5.25 for Tampico.

Tampico, jetty dues, for account consignees.

Vera Cruz, lighterage, if any, for account consignees.

All freights prepayable.

REPORT OF JOSEPH L. BRISTOW.

129

NEW YORK TO PROGRESO.

[Effective January 2, 1905. Subject to change without notice.]

Acids, carboys.....	each..	\$2. 25
Acids, in iron drums.....	per 100 pounds..	. 60
Animals, cattle (net).....	per head..	40. 00
Animals, horses (net).....	do.....	75. 00
Animals, dogs (net).....	do.....	10. 00
Animals, calves, in crates.....	per cubic foot..	. 25
Animals, hogs, in crates.....	do.....	. 25
Animals, small fowl, in crates.....	do.....	. 25
Apples.....	per barrel..	1. 35
Asphalt.....	per 100 pounds..	. 30
Ammonia, in iron drums.....	each..	2. 00
Barley.....	per 100 pounds..	. 35
Beer, ale, or porter, bottled.....	per cubic foot..	. 15
Bran.....	per 100 pounds..	. 45
Brick, fire or common.....	do.....	. 25
Brick, hollow.....	do.....	. 40
Carbide.....	per pound..	. 01
Cartridges.....	per 100 pounds..	1. 75
Caustic soda.....	do.....	. 30
Cement.....	do.....	. 20
Clay, fire or common.....	do.....	. 25
Cocoa.....	per cubic foot..	. 17½
Copper ingots, pigs, and sheets.....	per 100 pounds..	. 35
Corkwood.....	per cubic foot..	. 12½
Corn, 5,000 bushels.....	per bushel..	. 10
Corn, over 5,000 bushels.....	do.....	. 09
Cotton.....	per 100 pounds..	. 40
Crackers, in barrels or cases.....	per cubic foot..	. 15
Coke.....	per 2,240 pounds..	a 6. 00
Coal.....	do.....	a 4. 00
Deck freight, n. o. s.....	per cubic foot..	. 20
Dynamite.....	per pound..	. 01
Empty barrels.....	per cubic foot..	. 10
Flour, in barrels.....	per barrel..	. 70
Flour, in half barrels.....	per half barrel..	. 40
Furniture, k. d.....	per cubic foot..	. 12½
Fireworks.....	do.....	. 20
Glassware, common.....	do.....	. 12½
Glass, window.....	per 100 pounds..	. 45
Grease, axle.....	do.....	. 35
Grease.....	do.....	. 35
Grindstones.....	do.....	. 35
Grapes.....	per cubic foot..	. 20
Gasoline.....	per 100 pounds..	1. 50
Hay, compressed bales.....	do.....	. 40
Hay, "Lowry" bales.....	do.....	. 30
Houses, portable.....	per cubic foot..	. 12½
Iron and steel, band, bar, boiler, rod, and tank, galvanized, and corrugated.....	do.....	. 25
Iron and steel, bolts, nuts, hinges, nails, butts, rivets, screws, spikes, and washers, per 100 pounds.....	do.....	. 30
Iron beams and girders, not over 30 feet or 2,000 pounds.....	do.....	. 25
Iron over 30 feet b.....	do.....	
Iron pipe.....	per 100 pounds..	. 25
Iron pipe fittings.....	do.....	. 25
Lamps, lanterns, and fixtures.....	per cubic foot..	. 12½
Lath and shingles.....	do.....	. 12½
Lead, in pigs or sheets.....	per 100 pounds..	. 30
Lead pipe.....	do.....	. 30
Lumber, white pine.....	per 1,000 feet..	8. 00
Lumber, hard-wood.....	do.....	9. 00
Lard.....	per 100 pounds..	. 30
Machinery, piece or package under 2,000 pounds.....	do.....	. 45

a Net.

b Special.

Machinery, piece or package under 2/4,000 pounds	per 100 pounds	\$0.55
Machinery, piece or package under 4/6,000 pounds	do.	.70
Machinery, piece or package under 6/8,000 pounds	do.	.85
Machinery, piece or package under 8/12,000 pounds	do.	1.10
Machinery, piece or package under 12/20,000 pounds	do.	1.40
Any piece or package of the above subject to measurement will be charged at the rate of 17½ cents per cubic foot, if paying ship better than weight rate.		
Marble dust	per 100 pounds	.25
Meal	per barrel	.85
Measurement goods	per cubic foot	17½
Mortar	per 100 pounds	.25
Oil, cotton-seed, kerosene, lubricating, myrabane, and lard	do.	.30
Oil, n. o. s.	do.	.45
Onions	do.	.55
Potatoes	do.	.55
Paints	do.	.35
Paper stock, strawboard, in compressed bales	do.	.35
Paper, straw	per cubic foot	12½
Paraffin wax	per 100 pounds	.35
Pianos and organs	per cubic foot	22½
Pipe, earthen sewer, not over 12 inches	per 100 pounds	.25
Pipe, earthen sewer, over 12 inches	do.	.30
Pitch	do.	.30
Plaster, in barrels	do.	.25
Potash	do.	.35
Rails and fish plates	do.	.20
Rice	do.	.25
Rosin	do.	.30
Rails (portable). ^a		
Safes, under 2,000 pounds each	do.	.75
Safes, from 2/5,000 pounds each	do.	1.00
Safes, over 5,000 pounds each	do.	1.50
Salt	do.	.30
Sand in barrels	do.	.25
Sewing machines	per cubic foot	.15
Shooks, box	do.	12½
Soap stock	per 100 pounds	.30
Soda, ash	do.	.30
Specie, under \$10,000	per cent.	b ½
Specie, \$10,000 and under \$50,000	do.	b ¾
Specie, \$50,000 and under \$100,000	do.	b 1
Specie, \$100,00 and upward	do.	b 1 ½
Stearin		b. 35
Tallow	per 100 pounds	.35
Talcum	do.	.35
Tar	do.	.30
Tobacco	do.	.45
Trunks	per cubic foot	.15
Turpentine	per 100 pounds	.30
Valuations	per cent.	1
Varnish	per 100 pounds	.35
Vegetables, not deck freight	do.	.55
Weight goods, n. o. s.	do.	.45
Wheat, whole or crushed	do.	.30
Whiting	do.	.35
Wire, barb, fence, and telegraph	do.	.30
Windmills, weight or measure, 15 cents per cubic foot or 40 cents per 100 pounds		

In addition to above rates, 5 per cent primage to be added.
Minimum B/L, \$6.

^a Special.

^b Net.

THE NEW YORK AND CUBA MAIL STEAMSHIP COMPANY, WARD LINE.

[James E. Ward & Co. (Incorporated), agents, 92-96 Wall street.]

NEW YORK, February 3, 1905.

Mr. R. L. WALKER,

Traffic Manager, Panama Railroad Company,
24 State Street, New York.

DEAR SIR: Replying to yours of February 2, I would advise that the rates from our pier, New York, to Habana and Santiago, Cuba, are as follows:

Boots and shoes.	
Canned goods.	
Drugs.	
Dry goods.	
Electrical material, no piece or package over 2,000 pounds.	
Glassware.	
Hardware.	
Lamps.	
Cigars and cigarettes.	
Tools.	
Machinery, no piece or package over 2,000 pounds.	
Soap.	
Typewriting machines.	
Common jewelry, with no valuation specified.	
Revolvers, no valuation.	
Barbed wire.	per 100 pounds.. \$0.20
Lard and provisions.	do. .20
Cartridges.	do. 1.50
Flour, in bags.	per bag. .25
Manufactured iron, if structural, not over 30 feet in length.	per 100 pounds. .21
Railroad material, such as rails, etc.	per gross ton. 4.00
Sewing machines.	per cubic foot. .08
Oil, in barrels—	
To Habana.	per barrel. 1.10
To Santiago.	do. 1.30

25 cents per 100 pounds; sub-
ject to measurement rate,
10 cents per cubic foot.

I beg to hand you herewith copy of tariff in effect at the present time to Veracruz and Tampico, also to Progreso, which may be of service to you.

Yours, very truly,

C. H. PATTENGILL,
General Freight Agent.

EXHIBIT B 24.

NEW YORK, February 21, 1905.

Hon. J. L. BRISTOW,

Ancon, Canal Zone, Panama.

DEAR SIR: Query No. 24.—What effect would it have on the revenues of the Panama Railroad to discontinue the steamship line?

I beg now to submit the following answer to that question:

The question involves a number of different important considerations, and I shall therefore classify my answer under the different heads which indicate the various points of view from which the question must be considered.

NET EARNINGS OF THE STEAMSHIP LINE.

Of course a discontinuance of the steamship line would result in a loss to the railroad revenues of all the net earnings of that line. These net earnings amounted during the year 1904 to a total of \$175,055.38. This figure is not absolutely exact, the returns for December not having yet been received, but the amount of net earnings of the line will certainly not be less than the figure stated.

This figure is reached by deducting from the total receipts of the steamship line for the year, \$1,116,913.80, the total expenses of the line, \$941,858.42. These receipts, so far as concern mails, passengers, excess baggage, miscellaneous receipts, and freight between New York and Colon are actual amounts not affected by any other transportation. So far as freight to or from points beyond Colon is concerned, they are arrived at by crediting the

steamship line with 55 per cent of the total receipts of the company for transportation between New York and Panama. This leaves, as the proportion for the railroad transportation between Panama and Colon, 45 per cent of the entire through rate on freight to and from Panama as a port of origin or destination, and upon the other business from 22.5 to 27.9 per cent of the entire through rate. These percentages are fixed in accordance with the practice of the company in its transactions with other carriers upon business, the water transportation of which is done by other lines, the railroad company receiving substantially the same proportion of the through rate which it receives upon business between European ports and ports on the west coast, and the steamship company receiving an amount which bears substantially the same proportion to the length of its line that the percentage received by European carriers on through business bears to the length of their lines. That the proportion does not unduly exaggerate the earnings of the steamship line is further shown by the fact that it results in an average net return upon outward cargo of \$4.36 per ton, and upon homeward cargo of \$4.19 per ton, while by sailing vessel the rate to the Isthmus from New York is \$4 per ton, and the Government has been actually paying from New Orleans to Colon to the United Fruit Company the same rate on lumber.

It is obvious, therefore, that the net earnings from the steamship line are not overstated. These earnings, of course, are not constant in amount, having been for some years, for particular reasons, less, and for some years greater, than the amount mentioned. The average for the years 1896-1904, inclusive, is \$125,000 per annum, an amount obviously much less than probable future net earnings. The revenue of the railroad company would be directly reduced by the discontinuance of the line by such amount.

LOSS OF BUSINESS CONSEQUENT UPON THE ABANDONMENT OF STEAMSHIP LINE.

The Panama Steamship Line furnishes, and has furnished, the only direct and regular means of transportation between New York and the Isthmus, and it is only by furnishing such direct and regular transportation that the company has been enabled to maintain the earnings of the railroad at the figure which they have reached. All other lines running to Colon are at only as a port of call, giving thus a service, slow, irregular, and not attractive to shippers.

If this company were to abandon its steamship line there would be no longer such direct and regular service. Various other companies have indicated a readiness to take part in transportation between the United States and Colon, but by making Colon a port of call only. A certain amount of traffic would undoubtedly be carried by such vessels, but they would be unable to furnish the transportation requisite to maintain the business of the route, which requires a prompt, regular, and trustworthy service, not subject to the delays which inevitably occur where a port is only one of a number at which a vessel calls.

Nor can it be expected that a new direct line between New York and Colon would be established to take the place of the company's line. The lines from the United States making Colon only a port of call would take enough of the business offering to make such a direct line unprofitable. Regular and frequent sailings can not be expected except under the present system. At the present time the United Fruit Company has been making Colon a port of call, at request of this company, for its New Orleans boats, our object in arranging this being to accommodate the Middle West and relieve an anticipated pressure on the facilities of our line through the canal business, but, though we have made favorable arrangements with them, they have not been willing to take any freight from Colon to the United States, finding cargo from other ports more profitable.

To secure traffic shippers must be assured that they can rely upon an opportunity to dispatch their goods at regular and reasonably frequent intervals, and that the goods will be forwarded to their destination without undue delay. These things are as important as the rates at which the goods are transported. For the great bulk of profitable traffic low rates will not compensate for uncertainty in transportation, and we have always found it necessary to be vigilant to secure this certainty. Any failure in this respect is immediately reflected in the amount of business seeking the route, which falls with every such failure and rises with every improvement. For example, since the establishment of a weekly instead of a ten-day service in 1899 the total outward-bound business of the steamship line passing over the railroad has increased from 51,206 tons in 1896, 53,230 tons in 1897, and 51,814 tons in 1898, to a total of 94,390 tons in 1904; while the homeward business has increased from 24,254 tons in 1896, 31,956 tons in 1897, and 34,462 tons in 1898, to 62,230 tons in 1904. In the same period and under the same influences the tonnage to San Francisco rose from 22,561 tons in 1896 to 39,160 tons in 1904; while that from San Francisco to New York rose from 13,096 tons in 1896 to 30,272 tons in 1904.

In the case of the European lines we have often found it necessary to make use of our ability to ship goods to Europe via New York (to which I shall hereafter refer), in order to overcome difficulties that arose from the fact that none of those lines were ready to furnish

the service necessary to obtain and hold the traffic. The same difficulty would arise in the case of lines from the United States, and if this company's line were abandoned there would be no way of meeting it.

By its bills of lading and those which are issued for transportation over the railroad to points beyond the company reserves the right of forwarding from Colon by such carrier as it should select. While the company has run its own steamship line from New York, this provision has been of great value. If freight bound to Europe was not properly and promptly taken care of by the European lines running to Colon, or if rates were not made which would enable this company to secure business profitable to it, the company has been in a position to forward the freight by its own line to New York, and thence to Europe, which has given it control of the situation, and enabled it to draw to the Isthmus much traffic which it would otherwise have lost. While it has very rarely been necessary for the company actually to take the step of forwarding the goods via of New York, it has frequently had occasion to threaten to do so, and the possibility that it might take this course has always been sufficient to secure for the railroad, from the trans-Atlantic lines, such advantages in service and rates as were necessary to draw to it the freight desired.

With the abandonment of the company's own steamship line it would suffer, then, in two ways. It would lose all power of insuring prompt and efficient service by the trans-Atlantic lines and would be left without any adequate connection with New York, while it would be powerless to control such connection as it might be able to secure. The company's experience has been ample to show that a great diminution in the business passing over the Isthmus would necessarily follow. The business between New York and San Francisco would, in my opinion, be nearly, if not quite, extinguished. Always exposed to severe competition from the transcontinental lines, to which will shortly be added that by the Tehuantepec, Honduras, and Guatemala railroads, the Panama route can hold its business only by furnishing regular, prompt, and efficient service. Nor would it, in my opinion, be possible to obtain a connection on the Pacific if the line from New York to Colon were less efficient and regular than now. It has always been difficult to secure regular transportation between Panama and San Francisco, and if a carrier on that route can not reckon upon prompt and regular service between Colon and New York it will be impossible, probably, to induce him to furnish satisfactory service for a business which is not in itself attractive under any circumstances. Nor, if such connection could be obtained, would it be possible to secure the business. The bulk of the freight offering at San Francisco for New York requires particularly prompt and regular dispatch. Wine, for example, which is the most important single item in that business, suffers greatly from delay in transportation, and complaints are always made when such delay occurs in respect of it.

In another way this power of forwarding the goods to Europe via New York has greatly affected the net results of the company's operations. It has frequently been the case that European lines running to Colon, seeking freight more profitable to themselves at various other ports of call, have left upon the Isthmus goods which they should have transported upon their own vessels, which have occupied the warehouses and cars of the company, at one time as many as 500 cars filled with goods which those vessels might have taken being in the yards of the company at Colon. By the threat of transporting these goods to Europe via New York the company has always been able to compel the trans-Atlantic carriers to furnish adequate service, and thus has saved itself from the great expense which such an accumulation of freight involves. This advantage the company would, of course, lose if it abandoned its steamship line.

TRANSPORTATION OF GOODS FOR THE COMPANY.

The net earnings and gross receipts of the steamship line, as estimated above, do not really indicate the whole direct advantage which the company obtains from its ownership of the line. The very large amount of supplies and stores for itself and its employees, which the company is continually transporting from New York to Colon, has been carried upon its steamers at a rate very much lower than that at which other freight has been carried. This advantage would of course disappear with the abandonment of the line, and should be taken into account in estimating its effect upon the revenues of the company. In the year 1904, for example, there were transported by the steamship line 5,000 tons of supplies for the railroad company and its employees, at a price of \$5 per long ton, amounting to \$25,000. It is impossible exactly to estimate what the additional amount of freight would have been had this business been carried for outside shippers, the rates varying with the character of the goods, and goods not for the company being taken on a measurement basis when that is more favorable to the ship. I think that on a conservative estimate this freight of \$25,000 would have to be doubled in cost to the company if the goods were carried by an outside carrier.

The loss to the company from the direct earnings of the steamship line, with the additional loss from higher rates on supplies, alone can not be estimated with accuracy. The

sum of these may be, I think, properly set at from \$225,000 to \$250,000 per annum, but will be greater as business to the Isthmus increases.

The loss in other ways will, in my opinion, be far greater in amount, but data are lacking to estimate it properly, for nobody can say how much the railroad will suffer from the loss of all control over connecting carriers and of all power to maintain suitable connections with New York, which will follow the abandonment of the line. The San Francisco business will, I am quite clear, be wholly, or almost wholly, lost, and the earnings of the railroad alone from this business amounted in 1904 to \$106,951 on westbound business and \$67,293.62 on eastbound business. Concerning the trans-Atlantic business, it is impossible to speak except generally. The increasing growth of traffic between Europe and the west coast via the Straits of Magellan will render it easier for this trade to take another route, and it has been our experience that only our ability to control the situation through our steamship line has enabled us to keep this business in a satisfactory condition. It is to us very clear that to surrender the various advantages of this line would imperil the ability of the railroad to maintain itself and pay its fixed charges, which latter now amount, and for the next twenty years will amount, to \$500,000 per annum.

Upon the whole subject, the abandonment of the steamship line will probably reduce the earnings of the railroad company to a point where it would not be able to pay its fixed charges and cost of maintenance, and it would, I think, be likely to reduce the business passing over the railroad to an exceedingly small amount from the inability to furnish regular transportation between New York and the Isthmus, and inability to control the operations of the Atlantic lines which would result.

Very respectfully, yours,

E. A. DRAKE, *Vice-President.*

EXHIBIT B 25.

Question.—What is the basis upon which the division of freight charges from New York to Panama are made between the railroad and steamship line?

Answer.—

	Per cent.
Panama Railroad.....	45
Panama Steamship Line.....	55

R. L. WALKER, *Traffic Manager.*

FEBRUARY 6, 1905.

EXHIBIT B 26.

Question.—Why did you reduce the local tariffs, and what benefit do you expect to accrue from such reduction?

Answer.—The local freight tariff, payable in gold, was made in 1892, and the necessity for some change has long been apparent. No change had been made because of the attitude of the Government of Colombia in imposing various indirect charges upon our company which we felt unjustified by the contract, and as we were required to notify the Government upon making any change of the tariff it seemed possible that any change might be made an excuse for some other governmental demand. The superintendent was authorized to make, and did make, special rates to encourage the development of industries on the Isthmus. The present appeared an opportune time to make changes without sacrificing our revenue, which may be fairly expected to keep up because of the increase in the population along the line of the road, and, furthermore, by making the extraordinary reductions for short distances it is expected that the mule teams, which have heretofore started from Panama, and the boat service from Colon will find it unprofitable to continue operations, and that we will thus secure a revenue from that increase to traffic on the road.

R. L. WALKER.

FEBRUARY 6, 1905.

EXHIBIT B 27.

Question.—Why did you reduce local telegraph tolls, and what benefit do you expect to accrue from such reduction?

Answer.—We have had a reduction of telegraph tolls under consideration for a long time, but until recently our facilities were so restricted and the cost of maintenance so heavy that we maintained a high tariff to partly reimburse us, especially as because of depressed local conditions no increase of business was expected from a reduction.

Recently conditions have changed. The Canal Commission's wires and our own have been reconstructed and combined in one service, and with the development which has progressed steadily in our branches during 1904 it was expected that the necessity for telegraph and telephone communications would so increase as to make the returns in the aggregate more than equivalent to those under the old tariff. The railroad telegraph has always been a charge upon operation, the receipts from all sources having been less than 50 per cent of the outlay for the new construction and maintenance and cost of operation. Better results are confidently expected.

EXHIBIT B 28.

FEBRUARY 2, 1905.

Question.—State number of steamship lines operating on the Pacific coast with which traffic arrangements from Panama might be made.

Answer.—Nine in all.

1. Pacific Mail Steamship Company (with whom we now have arrangement).
2. Pacific Steam Navigation Company (with whom we now have arrangement).
3. Cia. Sud-Americana de Vapores (with whom we now have arrangement).
4. The Kosmos Line, operating via Straits of Magellan between Hamburg, Germany, and Puget Sound, on the Pacific, touching at the principal ports on the west coast of the American continent.
5. Gulf Line, operating from England via the Straits of Magellan to ports of South America as far north as Guayaquil.
6. Lamport & Holt Line, operating from England via the Straits of Magellan to ports of South America, as far north as Guayaquil.
7. Merchants' Line, operating from New York via the Straits of Magellan to the ports of South America as far north as Guayaquil.
8. Beeche, Duval & Co. also operate steamers more or less regularly from New York via the Straits of Magellan to the ports on the west coast of South America, seldom north of Guayaquil.
9. The American-Hawaiian Steamship Line, operating regularly from New York via the Straits of Magellan to Pacific ports of the United States and the Sandwich Islands.

R. L. WALKER, *Traffic Manager.*

EXHIBIT B 29.

Question.—Have there been any negotiations looking to traffic arrangements with the companies on the Pacific not now connections of the railroad company at Panama?

Answer.—We have approached the Kosmos Line and the Merchants' Line at various times during the past four or five years, offering inducements to them to join us by connection from Panama, but they have always considered it incompatible with their interests via Magellan, notwithstanding the fact that the Pacific Steam Navigation Company operate a line from England via Magellan to the ports of South America as far north as Pimentel, and also work with us via the Isthmus to the west coast ports of South America as far down the coast as Corral, to the south of Valparaiso.

We also opened negotiations with the American-Hawaiian Steamship Line in 1901, when we had no contract with the Pacific Mail Steamship Company. They sent their superintendent to the Isthmus to look over the situation, and finally decided that they could do better by operating between New York and the Pacific coast via the Straits of Magellan than could be done by breaking bulk and reloading their ships at either side of the Isthmus. We have had no negotiations with the Lamport & Holt, Gulf, or the Beeche, Duval lines about making connections with us.

R. L. WALKER, *Traffic Manager.*

FEBRUARY 6, 1905.

EXHIBIT B 30.

Question.—Schedule of rates of United Fruit Company's vessels from the United States to Central and South American ports.

Answer.—We attach tariff No. 1 and classification governing the same, which took effect January 1, 1904. These tariffs were copied from our tariffs from New York to Colon and ports reached via the Isthmus route on the west coast of South America, Central America, and Mexico. The steamers on the line sailing under foreign flags are not permitted to carry cargo to the Pacific coast of the United States.

R. L. WALKER, *Traffic Manager.*

FEBRUARY 6, 1905.

UNITED FRUIT COMPANY'S STEAMSHIP LINE, "GULF AND PANAMA ROUTE."

United Fruit Company's steamship line; Pacific Steam Navigation Company; Panama Railroad;
Cia. Sud-Americana de Vapores.

No. 1.

Tariff of freight rates from New Orleans, La., to Colon and Panama and ports in Costa Rica, Nicaragua, Mexico, Republic of Colombia, Ecuador, Peru, and Chile, taking effect January 1, 1904 (subject to change without notice). Steamers sail from New Orleans weekly, receiving freight up to noon on the previous day of sailing. United Fruit Company's Steamship Line, 321 St. Charles street, New Orleans, La. M. J. Dempsey, traffic manager.

Rates of freight to Colon.

[Effective January 1, 1904, the following rates will apply per ton of 40 cubic feet, or 2,000 pounds, at steamer's option.]

Classes:

D.....	\$20.00
1.....	10.00
2.....	8.00
3.....	6.00
4.....	5.00
Minimum.....	3.00
Subject to the following exceptions—	
Beer, in barrels, each.....	.85
Acids, on deck, per pound.....	.03
Gunpowder (in metallic kegs), per pound.....	.03
Gold or silver coin, dust, or bars (one-half of 1 per cent on value).....	
Oil, refined kerosene, per case of 2 cubic feet, each.....	.25
Plated ware, silverware, jewelry, watches, pistols, etc., 1 per cent on value in addition, per cubic foot.....	.25
Lumber, per M feet B. M.....	10.00
Parcels (not exceeding 2 cubic feet), each.....	1.00

RULES AND CONDITIONS OF SHIPMENT.

All freight must be prepaid in United States gold.

No bill of lading signed for less than minimum charge.

All packages of unusual bulk or weight will be taken only by special agreement.

Owners' risk.—Oils and other liquids are taken only at owners' risk of leakage. Glassware, crockery, and all fragile property concealed in packages only at owners' risk of breakage.

All perishable property only at owners' risk of frost, heat, and decay.

Dynamite and high explosives of any kind not carried.

Refined petroleum taken only when put up in tin cans, boxed, and marked as required by United States law.

Shippers must comply with all consular regulations for manifests, invoices, certification, etc., and any fine imposed by authorities at port of destination, or damage resulting from failure in this respect, or for errors or omissions therein shall be at the risk and expense of consignees of the goods and shall be paid by them.

Rates of freight to Panama.

[Effective January 1, 1904, the following rates will apply per ton of 40 cubic feet, or 2,000 pounds at steamer's option.]

Classes:

D.....	\$48.00
1.....	28.00
2.....	24.00
3.....	21.60
4.....	14.40
Special (on 10-ton lots of fourth-class freight).....	13.20
Minimum.....	4.00
Subject to the following exceptions—	
Beef and pork, in barrels, each.....	2.50
Beef and pork, in half barrels, each.....	1.40
Beef and pork, in quarter barrels, each.....	.80
Beans, flour, onions, pease, potatoes, rice, soap, per ton weight.....	10.00
Boots and shoes, dry goods, per ton measurement.....	20.00
Flour (in 10-ton lots), per ton weight.....	7.00
Gunpowder, in metallic kegs, per pound.....	.06

Hams, dried and salt fish, per ton, measurement.....	\$12.00
Lager beer, in barrels, each.....	2.00
Lager beer, in cases, candles, per ton measurement.....	10.00
Lumber (not exceeding 20 feet in length), per M feet B. M.....	20.00
Lumber (not exceeding 20 feet in length), per feet B. M., in lots of 10,000 feet.....	16.00
Pitch, tar, rosin, cement, per ton weight.....	6.00
Refined petroleum, per ton measurement.....	16.00
Sugar, refined, per ton measurement.....	10.00
Parcels, not exceeding 2 cubic feet, each.....	2.00

Rules and conditions of shipment, same as to Colon.

Rates of freight to Central American ports.

[Effective January 1, 1904, the following rates will apply per ton of 40 cubic feet, or 2,000 pounds, at steamer's option.]

To—	Classes.						Mini- mum.
	D.	1.	2.	3.	4.	Special on 5-ton lots of fourth- class freight.	
Punta Arenas.....	\$48.00	\$28.00	\$20.00	\$20.00	\$15.00	\$10.00	
San Juan del Sur.....							
Corinto.....							
Amalpala.....							
La Union.....							
La Libertad.....	48.00	32.00	20.00	20.00	15.00	12.40	\$5.00
Acajutla.....							
San Jose de Guat.....							
Camperico.....							
Ocos.....							

Subject to the following exceptions:

To Punta Arenas:

Flour.....	per 100 pounds..	\$0.50
Refined petroleum.....	per cubic foot..	.25
Barbed wire.....	per 100 pounds..	.50
Rosin.....	do.....	.50
White and yellow pine lumber.....	per 1,000 feet B. M..	20.00
Parcels not exceeding 2 cubic feet.....	each..	2.50

To other Central American ports:

Flour.....	per 100 pounds..	.45
Refined petroleum.....	per cubic foot..	.35
Rosin.....	per 100 pounds..	.50
White and yellow pine lumber.....	per 1,000 feet B. M..	24.00
Parcels not exceeding 2 cubic feet.....	each..	3.00

Rules and conditions of shipment, same as to Colon.

Rates of freight to Mexican ports.

[Commencing with shipments from New Orleans, January 1, 1904, the following rates will apply per ton of 40 cubic feet, or 2,000 pounds, at steamers' option.]

To—	Classes.						Mini- mum.
	D.	1.	2.	3.	4.	Special (on 5-ton lots on fourth- class freight.)	
Acapulco.....	\$50.00	\$36.00	\$22.80	\$20.40	\$16.80	\$13.20	\$5.00
Manzanillo.....							
San Blas.....							

Beer, glassware (except cut), oakum, shooks.....	per ton..	\$12.00
Brushes, boots and shoes, refined petroleum.....	do.....	15.00
Cotton piece goods.....	do.....	18.00
Parcels not exceeding 2 cubic feet.....	each..	3.00

NEW ORLEANS, January 1, 1904.

Rates of freight to ports in Republics of Colombia, Ecuador, Peru, and Chile.

	Ports of—			
	Colombia.	Ecuador.	Peru.	Chile.
	Buenaventura. Tumaco. Esmeraldas. Bahia. Manta. Cayo. Ballenita.	Guayaquil. Port Bolivar.	Tumbes. Eten. Huanchaco. Chimbote. Samanco. Casma. Supe. Huacho. Tambobes. Mora. Lomas. Chala. Quilca. Taital. Chanaral. Carrizal.	Payta. Pacasmayo. Salaverry. Callao. Cerro Azul. Pisco. Mollendo. Ilo. Arica. Pisagua. Caleta Buena. Iquique. Tocopilla. Cobija. Antofagasta. Caldera. Huasco. Coquimbo. Valparaiso. Taleahuano.
General merchandise (not elsewhere enumerated).	50 cents per cubic foot, or \$1 per 100 pounds.	37½ cents per cubic foot, or 75 cents per 100 pounds.	50 cents per cubic foot, or \$1 per 100 pounds.	25 cents per cubic foot, or 50 cents per 100 pounds.
Aerated waters, agricultural implements, axes, boots and shoes, blankets, blacking, bags and bagging, beer, bicycles, brooms, brushes, buckets, canned goods, canvas, carpets, candles, carriages, cotton waste, copper, cordage, crackers, drugs, edge tools, earthenware, electrical goods, furniture, floorcloth, glassware (common), hardware, harness, hats, ink, kettles (copper and iron), lamps, lanterns, leather, musical instruments, medicines, mucklage, machinery (pieces and packages under 2 tons), oilcloth, oil (lubricating), oakum, paper (printing or wrapping), potash, provisions, pumps, ropes, saddlery, salt, safes (under 2 tons), sewing machines, scales, shooks, soap, steel, stove castings, sugar pans, shovels, sugar mills, tinware, toys, trunks, twine, tools, varnish, wax, wine, woodenware.	37½ cents per cubic foot, or 75 cents per 100 pounds.	30 cents per cubic foot, or 60 cents per 100 pounds.	37½ cents per cubic foot, or 75 cents per 100 pounds.	25 cents per cubic foot, or 50 cents per 100 pounds.
Beef, butter, caustic soda, cheese, iron (bar, hoop, sheet, and galvanized), iron pipe (under 6 inches in diameter), lard, nails, paints, pork, rice, wire (iron, brass, copper, or barbed).	75 cents per 100 pounds.	60 cents per 100 pounds.	75 cents per 100 pounds.	50 cents per 100 pounds.
Matches (in tin-lined cases).	50 cents per cubic foot.	37½ cents per cubic foot.	50 cents per cubic foot.	30 cents per cubic foot.
Flour (in bags or barrels), bricks, cement, grease, rosin, tallow, tar.	45 cents per 100 pounds.	45 cents per 100 pounds.	45 cents per 100 pounds.	45 cents per 100 pounds.
Metallic cartridges.	\$1.50 per 100 pounds.	\$1 per 100 pounds.	\$1 per 100 pounds.	75 cents per 100 pounds.
Refined petroleum, in cans, boxed.	30 cents per cubic foot.	25 cents per cubic foot.	25 cents per cubic foot.	25 cents per cubic foot.
Acids.	\$6 per 100 pounds.	\$6 per 100 pounds.	\$6 per 100 pounds.	\$6 per 100 pounds.
Plated ware and silverware, jewelry, watches, revolvers.	50 cents per cubic foot and 1 per cent on value.	50 cents per cubic foot and 1 per cent on value.	50 cents per cubic foot and 1 per cent on value.	50 cents per cubic foot and 1 per cent on value.
Gold and silver coin, bars or dust, precious stones, etc.	1½ per cent on value.	1½ per cent on value.	1½ per cent on value.	1½ per cent on value.
Parcels (per cubic foot or fraction of a foot).	\$2.50.	\$2.50.	\$2.50.	\$2.50.

Rules and conditions of shipment, same as to Colon.
 All freight must be prepaid and is payable in United States gold.
 No bill of lading signed for less than \$5.

Goods taken by weight or measurement, at carrier's option, unless otherwise stated.

All packages of unusual bulk or weight will be taken only by special agreement.

Owner's risk.—Oil and other liquids are taken only at owner's risk of leakage. Glassware, crockery, and all fragile property concealed in packages, only at owner's risk of breakage.

All perishable property only at owner's risk of frost, heat, and decay.

Dynamite, blue powder, or high explosives of any kind not carried.

Refined petroleum taken only when put up in tin cans, boxed, and strapped and marked as required by United States law.

Shippers must comply with all consular regulations, for manifests, invoices, certification, etc.; and any fine imposed by authorities at port of destination or damage resulting from failure in this respect, or for errors or omissions therein, shall be at the risk and expense of consignees of the goods, and shall be paid by them.

EXHIBIT B 31.

Question.—List of steamship companies that operate vessels from ports of the United States to South American ports.

Answer.

From New York:

Merchants' Line (British), operated by W. R. Grace & Co., to west coast of South America.

West Coast Line (British), operated by Beeche, Duval & Co., to west coast of South America.

Red D Line (American), to Venezuelan ports.

Lamport & Holt Line (British); to Brazil and Argentine Republic.

Prince Line (British), to Brazil and Argentine Republic.

Sloman Line (German), to Brazil and Argentine Republic.

Nelson Line (British), to Argentine Republic.

Booth Line (British), to Brazil.

From New Orleans:

United Fruit Company (Swedish, Norwegian, and British), to Colon and Central American ports.

From San Francisco:

Pacific Mail Steamship Company (American), to Central and South American ports.

Kosmos Line (German), to Central and South American ports.

R. L. WALKER, *Traffic Manager.*

FEBRUARY 6, 1905.

EXHIBIT B 32.

Question.—Does the reduced local tariff make the charges for local freight across the Isthmus less than that charged for through freight? If so, would a reduction of charges for through freight from Europe and from New York result in increased business?

Answer.—It is anticipated that the reduced local tariff, combined with the rates from Europe or from New York to Colon, will in some instances cut the present through rates. It is impossible to tell precisely what rates will be cut, because much of the cargo moves to Colon at rates based on the measurement of the goods, and the reduced local tariff expresses the rate per 100 pounds. As it develops that a shipper can consign his freight to Colon and reship across the road by the combination of locals at less than the through rates, we shall modify the through rates by supplementary tariffs. For instance, kerosene oil in tins, cased, has been paying 40 cents a cubic foot from New York to Panama. We find that the combination of 12½ cents per cubic foot to Colon and the rate of 35 cents per 100 pounds from Colon to Panama makes the cost through 55 cents a case, and we shall reduce our through rate to correspond.

As our steamship line reduces the through rates from New York to Panama on any commodity that can be shipped from Europe, the lines from Europe to Colon will also reduce their through rates to Panama, such being their custom. We do not look for an increase in traffic as a result of any such reductions, unless the people of Panama should find that the reductions are enough to direct orders to New York or to Europe instead of to San Francisco, the city now being supplied from these various sources. Any increase in the business is to be looked for from the activity created by the operations on the canal, with the consequent increase of the floating population at the Isthmus.

R. L. WALKER, *Traffic Manager.*

FEBRUARY 6, 1905.

EXHIBIT B 33.

TELEGRAPH TOLLS.

Question.—What per cent of the receipts for telegraph tolls are local and what per cent foreign?

Answer.—

1904—Receipts account cable messages.....	\$4,388.45
Receipts account local messages.....	1,663.85
	<hr/> 6,052.30

Cable message receipts, 72.51 per cent of total receipts.

Local message receipts, 27.49 per cent of total receipts.

EXHIBIT B 34.

Question.—Have the through cable rates to points beyond Panama been reduced as a result of the reduction of telegraph tolls across the Isthmus?

Answer.—No. Cable companies assign as reason for making no reduction that their rates are the same to both of our terminals, or in other words, they absorb our charge in theirs.

EXHIBIT B 35.

Question.—With how many European lines has the Panama Railroad Company traffic arrangements?

Answer.—Eight in all.

1. Royal Mail Steam Packet Company, London and Southampton to Colon.
 2. Fredk. Leyland & Co. (1900), Limited, West India and Pacific Branch, Liverpool to Colon.
 3. Harrison Line, Liverpool to Colon.
 4. Cie. Generale Transatlantique, France to Colon.
 5. Hamburg-Amerika Linie, Hamburg and Antwerp to Colon.
 6. La Veloce Navigazione Italiana a Vapore, Genoa and Mediterranean ports to Colon.
 7. Cia. Transatlantica de Barcelona, Barcelona and Mediterranean ports to Colon.
 8. Austro-Americana, Trieste, Genoa, and Mediterranean ports to Colon.
- Besides our own steamship line from New York. The Prince Line, formerly operating from Glasgow and Antwerp to Colon, suspended their service several years since.

R. L. WALKER, *Traffic Manager.*

FEBRUARY 6, 1905.

EXHIBIT B 36.

Question.—State in general the terms of the contracts or agreements with the European lines that have traffic arrangements with the Panama Railroad Company.

Answer.—Each of the lines operating from the different ports in Europe interchanges traffic with us at Colon, in accordance with the terms of the through bills of lading which have been mutually agreed upon. The lines in Europe make such reduced through rates as are necessary to move traffic from Europe via the Isthmus, in competition with the lines working via Magellan, and these through rates are divided between the respective carriers upon fixed percentages. For the traffic to Europe, the lines on the Pacific coast make the through rates which are necessary to secure traffic to the Isthmus route, and the interchange of traffic and division of revenue are made in the same manner as on business from Europe.

R. L. WALKER, *Traffic Manager.*

FEBRUARY 6, 1905.

REPORT OF JOSEPH L. BRISTOW.

141

EXHIBIT B 37.

Question.—What are the traffic arrangements with the Pacific Mail Steamship Company?

Answer.—The interchange of traffic with the Pacific Mail Steamship Company is governed by through bills of lading agreed upon between us. The Pacific Mail is to secure for the route all the traffic that can be had at reasonable and remunerative rates from the Pacific coast of the United States, certain ports in Mexico, and the west coast of Central America to New York and to Europe, and to make no connection with any other route than ourselves. The Panama Railroad Company in return is to secure from New York and from its other connecting Atlantic lines at the Isthmus all the traffic that can be had at reasonable and remunerative rates for the same ports of Central America, Mexico, and the Pacific coast of the United States and to turn it over exclusively to the Pacific Mail Steamship Company at Panama. The rates in both directions are to be competitive down to a minimum of 40 cents per 100 pounds between New York and San Francisco. The initial carrier in each case is to make the rates, and if traffic will not stand a rate of 40 cents per 100 pounds, it is a matter for consultation as to whether some particular traffic offering can be carried at a lower rate and be remunerative.

More detailed information may be gathered from the contract between the Panama Railroad Company and the Pacific Mail Steamship Company, dated June 11, 1902, copy herewith.

R. L. WALKER.

THE PANAMA ROUTE.

Contract between the Panama Railroad Company and the Pacific Mail Steamship Company, dated June 11, 1902.

This agreement made this 11th day of June, in the year 1902, between the Panama Railroad Company, duly chartered and organized under the laws of the State of New York, and hereinafter called the railroad company, party of the first part, and the Pacific Mail Steamship Company, also duly chartered and organized under the laws of the said State, and hereinafter called the steamship company, party of the second part, witnesseth:

Whereas the said railroad company is now operating its railroad across the Isthmus of Panama, and running a line of steamers from New York to Colon on the Atlantic Ocean; and

Whereas the said steamship company is now running a regular line of steamers on the Pacific Ocean between San Francisco and Panama and intermediate ports on the Central American and Mexican coast; and

Whereas both companies are interested in and desirous of hereby establishing conditions under which they may carry on regularly and without interruption the business of transportation between San Francisco and New York and the said intermediate ports, with the intent hereby declared by both parties to develop to the fullest possible extent traffic by the Isthmus of Panama and to prevent the diversion of the business of said Isthmus to other routes:

Now, therefore, in consideration of these premises and with the intention of so securing to both of the parties hereto the advantages of a contract of the general character above set forth for a term of years, and in consideration of the sum of \$1 by each of the parties hereto to the other paid before the delivery hereof it is mutually covenanted and agreed by and between the respective parties hereto, and their respective successors, assigns, and legal representatives, as follows, that is to say:

ARTICLE I.

The railroad company hereby concedes to the steamship company (so far as its charter and its contract with the Colombian Government permit) the exclusive privilege of through billing to and from any and all ports of Central America, Mexico, the United States, and British Columbia, on the Pacific Ocean, under and during the life of this contract as hereinafter provided, and in connection with the railroad company and each and every one of its Atlantic connecting lines.

During the pendency of this contract, the steamship company, when taking on its vessels for shipment at San Francisco or at any Pacific coast port situated between San Francisco and Panama, merchandise destined to Atlantic or Gulf ports of the United States or to European points shall issue its through bills on such merchandise only via the Isthmus of Panama.

At New York and San Francisco business transported or to be transported by the Panama route is to be delivered to and received from connecting lines, the rates on such business so delivered to or received from connecting lines to be made by adding to the charges of such

connecting lines, and all transfer charges the rates prescribed under this agreement for transportation between New York and San Francisco.

And both parties agree respectively (within the scope of their powers and as far as they can consistently with their own safety and protection and with their duties as common carriers) to cooperate with each other in making such rates and in generally taking such measures as will afford to both parties protection against interference or competition by other steamship lines with the traffic hereby conceded by each to the other.

ARTICLE II.

Section A.—There shall be maintained by the steamship company a through line of steamers each way between Panama and San Francisco and such intermediate ports at which the steamship company now calls, as well as any other intermediate ports on the Pacific coast as above recited whose traffic shall develop sufficiently to warrant making them ports of call; the steamship company shall, subject to the perils of the seas, make at least three trips each way per month between Panama and San Francisco, and the steamers shall be those now running on the steamship company's line between said ports, or others of approximately equal capacity and speed. In case any of the steamers engaged in the above service be lost or destroyed, the steamship company agrees to promptly replace such lost or disabled vessel or vessels by another or others of approximately equal capacity and speed, so far as necessary to maintain the service as above described, namely, a through line of steamers between Panama and San Francisco, and the intermediate ports as aforesaid, and the three trips each way per month as aforesaid by said present steamers or others of approximately equal capacity and speed.

Section B.—The railroad company shall maintain a line of steamers each way between New York and Colon, and it shall, subject to the perils of the sea, make at least three trips each way per month between New York and Colon, and the steamers shall be those now running on the railroad company's line between said ports, or others of approximately equal capacity and speed. In case any of the steamers engaged in the above service be lost or destroyed the railroad company agrees promptly to replace such lost or disabled vessel or vessels by another or others of approximately equal capacity and speed, so far as necessary to maintain the service as above prescribed, namely, a through line of steamers between New York and Colon as aforesaid, and the three trips each way per month as aforesaid by said present steamers or others of approximately equal capacity and speed.

Section C.—These two steamship lines, connecting respectively at Panama and Colon with the Panama Railroad, shall constitute, with said railroad, what shall be hereafter called the "Panama route" between New York and San Francisco.

ARTICLE III.

The intention and purpose of this agreement being to obtain for the said "Panama route" all the freight business that can be secured at reasonable and remunerative rates, it is agreed that either party to this agreement shall, at the request of the other party thereto, publish and make operative such through rates between New York and San Francisco as will compete with those made operative by the competing transcontinental railroad lines, and failure to comply with such request within twenty days from the date of its receipt shall constitute a violation of this contract, and subject the offending party to the provisions of Article XIX of this contract.

Both parties, however, agree that whenever either party without request from the other puts in operation on east or west bound traffic between San Francisco and New York, or requests the other to put in operation on such traffic, a through rate of less than 40 cents per hundred pounds, or 10 cents per cubic foot, then the party so putting into effect such rate without request from the other or the party making such request agrees to bear itself whatever difference there may be between the minimum rate above stated and the rate so put in operation or requested below such minimum rate.

ARTICLE IV.

During the term of this contract the railroad company shall not, directly or indirectly, run any steamers on the Pacific north of Panama, and shall (in so far as its charter and its contract with the Colombian Government may permit, and so far as it can consistently with its own safety and protection under existing treaty stipulations) in every manner lawfully and reasonably within its power promote and protect the interests of the steamship company in all traffic north of Panama in connection with said railroad and its Atlantic connecting lines, and especially against all forms of competition whatsoever, and will (so far as it is practicable) give, turn over to, and direct to the vessels of the steamship company to the extent that it can lawfully control or influence the same all business destined to Pacific

REPORT OF JOSEPH L. BRISTOW.

143

points north of Panama originating on the Isthmus of Panama and carried upon its railroad or which may be brought to said Isthmus by its own ships or by other ships or lines, and especially will not, so long as the steamship company faithfully performs the stipulations of this agreement, become interested in or divide with any other person or persons, or corporation or corporations, the earnings of a through line or any through business to or from points on the Pacific coast north of Panama, and upon all such through business the full local tariff rates for the time being in force for transportation across the Isthmus of Panama shall be charged to all competing lines, and the railroad company will pay to the steamship company the amount of the share of the through rate to which the steamship company would have been entitled if such through business had been carried over its line.

Further, the parties hereto, each for itself, agree that all freight, passengers, baggage, specie, and mail matter confided to either for transportation or brought by the one party to the other for the purpose of being conveyed in either direction over and upon the whole or any part of said Panama route shall be transported and carried promptly and without undue delay.

During the pendency of this contract the steamship company binds itself not to run vessels directly or indirectly from any port on the eastern shore of the North American continent to Colon or to the eastern terminal of any of the transcontinental routes.

The steamship company agrees during the pendency of this contract (in so far as its charter may permit, and so far as it can consistently with its own safety and protection under existing treaty stipulations) in every manner lawfully and reasonably within its power to promote and protect the interests of the railroad company in the traffic of the Panama route, and especially against all forms of competition whatsoever; the steamship company further agrees during the pendency of this contract not to divert from the Panama route the traffic to or from any of the Pacific ports between San Francisco and Panama originating at or destined to Atlantic or Gulf ports of the United States or European ports. And for such business the steamship company shall not enter into contracts of any kind involving through billing with any person, party, or corporation other than the Panama Railroad Company, nor shall the steamship company compete directly or indirectly (by reduced rates or otherwise) with the "Panama route" on said business, and on any business so diverted directly or indirectly by it the steamship company shall pay to the railroad company the freight it would have been entitled to receive if such business had been carried across the Isthmus on its railroad.

ARTICLE V.

It is agreed that through freight rates so far as the same accrue to the railroad company and steamship company shall be divided between them as follows:

On freight between United States Atlantic coast ports and United States Pacific coast ports:

To the railroad company, 50 per cent.

To the steamship company, 50 per cent.

Minimum rate, 40 cents per hundred pounds or 10 cents per cubic foot.

On freight between United States Atlantic coast ports and Mexican or Central American ports:

To the railroad company, 60 per cent.

To the steamship company, 40 per cent.

Minimum rate to or from Mexican ports, 60 cents per hundred pounds or 30 cents per cubic foot, ship's option.

Minimum rate to or from Central American ports, 50 cents per hundred pounds or 25 cents per cubic foot, ship's option.

On foreign freight between European ports and Mexican or Central American ports:

To the railroad company, 40 per cent.

To the steamship company, 60 per cent.

Minimum rate, 35 shillings per ton of 2,240 pounds or 40 cubic feet.

On foreign freight between European ports and United States Pacific coast ports:

To the railroad company, 37½ per cent.

To the steamship company, 62½ per cent.

Minimum rate, 40 cents per hundred pounds or 10 cents per cubic foot.

The above-described divisions between the railroad and steamship company shall apply to the portion of the through freight rates accruing to said companies on business and traffic, whether originating at or destined to the ports above mentioned or points prior or subsequent thereto.

Subject to above-agreed minima, the freight rates between United States Atlantic and United States Pacific coast ports, and between United States Atlantic coast ports and Mexican or Central American ports, and between Mexican, Central American, or United States Pacific coast ports and European ports, are to be fixed by the initial carriers. All tariffs

naming rates and commodities are to be made by mutual consent and become effective with the date of this agreement.

It is further agreed that if, during the pendency of this contract, it becomes necessary, on account of quarantine or revolutions, or the acts of any government, to hold and warehouse freight, mail, specie, etc., at any point on the railroad or steamship company's lines, all charges thereon are to be considered as line charges, and are to be prorated between the lines in interest according to the divisions of the through rates, it being understood that the charges for handling and warehousing by the railroad or steamship company are to be at cost.

ARTICLE VI.

It is mutually agreed that the term "ton," as used in this agreement, shall mean 2,240 pounds avoirdupois, or 40 cubic feet measurement when so taken by the ships, unless otherwise expressly provided herein.

ARTICLE VII.

Passenger rates accruing to the railroad and steamship company between New York and Pacific coast ports, Panama to San Francisco, both included, shall be divided as follows:

To the railroad company, 50 per cent.

To the steamship company, 50 per cent.

Through passenger rates effective under terms of this contract are those which were in effect December 1, 1899, and any change therefrom is to be made only by mutual consent in writing; but either party to this contract is at liberty to diminish any agreed rate, but at its own cost, by the amount of the proportion accruing to it under the above divisions.

Any commissions paid agents for soliciting and obtaining passenger business covering service of Panama route are to be divided between the railroad company and the steamship company pro rata according to the divisions of the through rate.

Both parties shall have the right to appoint and maintain agents at any point they may select.

ARTICLE VIII.

The steamers of the Pacific Mail Steamship Company shall make use of the La Boca wharf provided by the Panama Railroad Company whenever in the judgment of the Pacific Mail Steamship Company it is safe and prudent so to do; but in the event of the steamers not being able to get alongside said wharf without delay, then the cargo, etc., shall be lightered in the Bay of Panama.

When steamers load or discharge alongside La Boca wharf no charge shall be made on passengers, mails, specie, baggage, etc., but the railroad company shall be paid as wharfage on all other cargo (when same is taken from or landed on the wharf direct) a maximum rate of 80 cents American gold per ton, it being understood that the railroad company is to provide at its wharf at La Boca the necessary equipment for the efficient operation thereof and for the prompt loading and unloading by the steamship company of its vessels, compensation for all which is included in above wharfage.

If the railroad company furnishes cranes, there shall be an additional charge of 10 cents per ton on the cargo for the use of such cranes, such usage, however, of cranes being optional with the steamship company.

When lighterage is performed by the railroad company and the lighters are loaded or discharged at La Boca, no charge other than the lighterage charged is to be made the steamship company for the use of La Boca wharf or cranes, or loading or unloading the lighters at the wharf.

If the steamship company elects to enter service between Panama and Chiriqui, such service is to form part of this contract, and the steamship company is to have the right to land all cattle it may carry on the beach at Panama free of any charge.

ARTICLE IX.

The railroad company shall, during the pendency of this contract, continue to employ its lighters when reasonably necessary to connect with the steamship company's vessels and the shore at Panama, the railroad company agreeing to furnish lighters in sufficient number to load and unload such vessels with dispatch.

When lighters are used the following shall be the lighterage charges:

For each ton of freight delivered by the steamship company to the railroad company, or by the railroad company to the steamship company, 90 cents per ton, United States currency.

For all specie or treasure, one-fortieth of 1 per cent.

For each passenger, \$1 United States currency.

No charge for extra baggage or mails.

Panama local cargo to be received and delivered by the party of the first part as agent for the party of the second part, in that city; the receipt or delivery thereof and transfer to and from steamer, including the lighterage, wharfage, and crange, to be performed by party of the first part, and party of the second part will pay for such services rendered \$1.25 per ton, whether lightered or received from or delivered to steamers at La Boca.

ARTICLE X.

The railroad company agrees to transport from Colon to Panama, supplies, excepting coal, exclusively for the use of the steamship company's steamers on the Pacific at \$3 per ton, and to lighter same at Panama at \$1 per ton additional, it being hereby agreed that the steamship company shall have the right to perform lighterage on its own coal and other supplies in its own lighters.

The railroad company agrees to transport by each steamer from New York to Colon supplies exclusively for the use of the steamship company at a rate a \$5 per ton.

ARTICLE XI.

The officers and employees of the steamship company shall be carried between Panama and Colon free, and between New York and Panama or Colon at the rate of \$10 for each passenger. The officers and employees of the railroad company shall be carried between Panama and San Francisco at the rate of \$20 for each passenger.

ARTICLE XII.

The railroad company agrees, so long as its wires are in working order, to obtain and furnish the steamship company all telegraphic and telephonic information through its agents that may be necessary to properly conduct the business of the Panama route.

ARTICLE XIII.

Each party hereto shall be responsible for cargo, specie, and mail while under its care and until delivered to its cocarrier.

Any responsibility accruing in regard to passengers or their baggage is to be assumed in like manner as cargo.

Whenever any loss or injury occurs, or damage from delay in transportation, the loss or injury or damage from delay, whether accruing with respect to cargo, specie, mail, passengers, or their baggage, shall, when same can not be located, be prorated between the railroad company and the steamship company according to the divisions of the through rate that may apply in each case.

In case any actions, suits, or claims shall be brought against any cocarrier, the carrier responsible, as above stipulated, shall bear and discharge any loss, damage, or expense incident thereto; provided, the carrier sued shall at once give notice to the other cocarrier, to the end that each may have opportunity to defend its interests.

ARTICLE XIV.

The carriage or transportation of salt, coal, and grain (except barley in bags between United States points) is hereby exempted from the operation of this contract, and each of the contracting parties reserves its full liberty as to the carriage or transportation of these articles.

ARTICLE XV.

The railroad company will do at its shops in Panama and Colon such work and repairs for the steamship company as the steamship company from time to time may request and as the railroad company can perform without interference with its own business, charging therefor the cost of labor and material on the Lethmus, with 10 per cent added thereto.

ARTICLE XVI.

The steamship company shall make over and deliver to the railroad company charter parties of even date with the present instrument, at the nominal rate of \$1 per month, and unconditional in terms of the following steamers belonging to said company and now running or to be run between Panama and San Francisco under this contract, to wit, the *Acapulco*, the *San Jose*, the *City of Sydney*, the *Colon*, the *City of Para*, and the *San Juan*, and agrees to likewise

make over and deliver to the railroad company like charters of any other steamers placed upon said service under the provisions of Section A of Article II of this contract, simultaneously with the placing of the same upon said service.

It is hereby further agreed that as long as the steamship company performs punctually and regularly three trips per month in each direction under and according to the provisions of Section A, Article II, of this contract, then these charters are to remain unenforceable.

If the steamship company, from any cause except the act of God, for the public enemy, or arising from the perils of the sea, omits two sailings in any one calendar month during the continuance of this contract, then the above charters are, as to all or any one or more of said steamers, at the railroad company's option, to become enforceable, and the railroad company shall have, and is hereby given the absolute right and power to run said vessels, or any of them, on the aforesaid described route and service, calling at all ports between Panama and San Francisco, and vice versa, for the account and risk of, and at the expense of said steamship company, during the unexpired portion of this contract, it being the express intent and agreement of the parties hereto that the covenants of this article shall be specifically enforceable, and that breach thereof can not be adequately compensated in damages.

The steamship company agrees, in the contingency aforesaid, peacefully to surrender to the railroad company, upon its demand in writing, the said steamers, or any of them, without the intervention of any court or legal proceedings of any kind whatsoever; the steamship company hereby irrevocably giving the railroad company all the power and authority needful in the premises, in order that the railroad company may take possession of said steamers or of any one or more of them, and operate them, or any one or more of them, under the provisions and terms of the charter parties hereto annexed; and it is expressly agreed that in case of any conflict of opinion or doubt as to the respective rights of the parties hereto under this clause, until such rights are finally established by the judgment and decree of a competent court, or by arbitration in the manner hereinafter provided, the steamship company or its successors will not, in the contingency herein contemplated, hold said ships as against any demand of said railroad company, and will not prevent or hinder the use of the same by the railroad company in the manner or in the business contemplated by this agreement.

ARTICLE XVII.

The railroad company shall make over and deliver to the steamship company charter parties of even date with the present instrument at the nominal rate of \$1 per month and unconditional in terms, of the following steamers belonging to said railroad company and now running or to be run between New York and Colon under this contract, to wit, the *Alliance*, the *Advance*, and the *Finance*, and agrees to likewise make over and deliver to the steamship company like charters of any other steamers placed upon said service under the provisions of Section B, of Article II, of this contract, simultaneously with the placing of the same upon said service.

It is hereby further agreed that as long as the railroad company's steamship line performs punctually and regularly at least three trips per month in each direction under and according to the provisions of Section B of Article II of this contract, then these charters are to remain unenforceable.

If the railroad company, from any cause except the act of God, or the public enemy, or arising from the perils of the sea, omits two sailings in any one calendar month during the continuance of this contract, then the above charters are, as to all or any one or more of said steamers, at the steamship company's option to become enforceable, and the steamship company shall have and is hereby given the absolute right and power to run said vessels, or any of them, on the aforesaid described route and service, between New York and Colon, and vice versa, for the account and risk of, and at the expense of said railroad company, during the unexpired portion of this contract, it being the express intent and agreement of the parties hereto that the covenants of this article shall be specifically enforceable and that breach thereof can not be adequately compensated in damages.

The railroad company agrees, in the contingency aforesaid, peacefully to surrender to the steamship company, upon its demand in writing, the said steamers, or any of them, without the intervention of any court or legal proceedings of any kind whatsoever; the railroad company hereby irrevocably giving the steamship company all the power and authority needful in the premises, in order that the steamship company may take possession of said steamers, or of any one or more of them, and operate them, or any one or more of them, under the provisions and terms of the charter parties hereto annexed; and it is expressly agreed that in case of any conflict of opinion or doubt as to the respective rights of the parties hereto under this clause, until such rights are finally established by the judgment and decree of a competent court, or by arbitration in the manner hereinafter provided, the railroad company or its successors, will not, in the contingency herein contemplated, hold said ships as against any demand of said steamship company, and will not prevent or hinder the use of the same by the steamship company in the manner or in the business contemplated by this agreement.

carried by an outside carrier.
The loss to the company from the direct earnings of the steamship line, with the additional loss from higher rates on supplies, alone can not be estimated with accuracy. The

REPORT OF JOSEPH L. BRISTOW.

147

ARTICLE XVIII.

For all joint business transacted under this contract and for all services or material furnished by the parties hereto to each other, there shall, except as herein otherwise expressly provided for, be rendered at New York a monthly account on the 25th day of each month for the business of the preceding month, such statement to cover all business of the preceding month cleared during said month, and the sums due shall be paid on that date to the creditor company.

ARTICLE XIX.

Any and all questions that shall or may arise touching this agreement, or the construction thereof, or any matters or things to be done or performed by either of the parties hereunder, shall be submitted to the decision and award of three arbitrators, who shall be disinterested persons, and who shall be chosen, one by each of the parties hereto, and the third by the two so chosen. Either party hereto may, at any time, notify the other in writing, that it elects to submit any such matter of difference to arbitration hereunder and name an arbitrator, and if the other party shall fail or omit to name an arbitrator within fifteen days after written notice of such selection of an arbitrator by the other party and written request to name an arbitrator, the arbitrator named by the party giving such notice shall name an arbitrator for and on behalf of the party so failing or omitting, who shall have the same power and authority as though he had been chosen and nominated by such party. And the decision and award of any two of such arbitrators, with respect to the matters so submitted to them, shall be binding and conclusive upon the parties; and each of the parties hereto does bind itself and its successors faithfully to abide by and carry out any award so made by any two of the arbitrators appointed as aforesaid. Any question of violation or failure to observe this agreement by either party, or any other question arising between them hereunder, may be submitted to such arbitrators, and they shall determine, first, as to the fact, and secondly, as to the amount of money damages to be paid by the party found guilty to the party making the charge, or the particular thing to be done or to be refrained from being done by such guilty party, and such amount shall be paid, and such award shall be complied with within ten days of the rendering of such award. The two parties both agree to furnish to the arbitrators any paper, instrument, or book in their possession which such arbitrators may request them to produce. Should any arbitration fail for any cause, then such proceedings as above prescribed may be taken de novo by either party to this agreement. All hearings by said arbitrators shall be held in New York or on the Isthmus of Panama, or in San Francisco, or such other place where witnesses necessary to appear before the arbitrators may be obtained with the least expense to the parties to this contract, and all fees and expenses of such arbitrators shall be borne by the party against whom the award of the arbitrators shall be made, and shall be assessed by said arbitrators and made part of their award.

This article shall be considered of the essence of this agreement and any breach of or failure to observe any of the terms thereof shall be deemed to be a material breach of the entire contract.

ARTICLE XX.

Any of the conditions of Articles V, VII, VIII, IX, X, and XI of this agreement may be altered by consent in writing of the parties hereto, signed by their respective presidents or vice-presidents, without affecting any of the other conditions of this agreement.

ARTICLE XXI.

Subject to the provisions of a contemporaneous agreement between the parties hereto of even date herewith, this contract, except as herein otherwise expressly prescribed, shall remain in force for three years from the 11th day of June, 1902, and for the further period of two years, if either party shall so elect, and if such party shall have given notice of such election to the other party hereto at least ninety days before the expiration of the first term of three years.

In witness whereof the said parties hereto have caused this instrument to be signed in their corporate names by their respective presidents, and their respective corporate seals to be hereunto affixed and attested by their respective secretaries, the day and year first herein above written.

PANAMA RAILROAD COMPANY,
By J. EDWARD SIMMONS, *President*.

Attest:
E. A. DRAKE, *Secretary*.

PACIFIC MAIL STEAMSHIP COMPANY,
By CHARLES H. TWEED, *President*.

Attest:
JOS. HELLEN, *Secretary*.

Answer.—We have had a reduction of telegraph tolls under consideration for a long time, but until recently our facilities were so restricted and the cost of maintenance so heavy that we maintained a high tariff to partly reimburse us, especially as because of depressed local conditions no increase of business was expected from a reduction.

STATE OF NEW YORK,

County of New York, ss:

On this 11th day of June, 1902, before me personally appeared J. Edward Simmons, personally known to me to be the individual who subscribed the within instrument for and in behalf of the Panama Railroad Company, who, being by me duly sworn, did depose and say: That he resided in New York City; that he was the president of the said corporation; that he knew the corporate seal of the said corporation; that the seal affixed to the said instrument was such corporate seal, and that the said instrument was signed by him and sealed in behalf of the said corporation by authority of its board of directors; and the said J. Edward Simmons acknowledged the said instrument to be the act and deed of the said corporation, and that the same was executed by said corporation freely and voluntarily for the purposes therein mentioned.

[Notarial seal.]

JOHN J. TIERNEY,

*Notary Public, Kings County.**Certificate filed in New York County, N. Y.*

STATE OF NEW YORK,

County of New York, ss:

On this 11th day of June, 1902, before me personally appeared E. A. Drake, personally known to me to be the individual who subscribed the within instrument for and in behalf of the Panama Railroad Company, who, being by me duly sworn, did depose and say: That he resided in New York City; that he was the secretary of the said corporation; that he knew the corporate seal of the said corporation; that the seal affixed to the said instrument was such corporate seal; and that the said instrument was signed and sealed by him in behalf of the said corporation by authority of its board of directors; and the said E. A. Drake acknowledged the said instrument to be the act and deed of the said corporation, and that the same was executed by said corporation freely and voluntarily for the purposes therein mentioned.

[Notarial seal.]

JOHN J. TIERNEY,

*Notary Public, Kings County.**Certificate filed in New York County, N. Y.*

STATE OF NEW YORK,

County of New York, ss:

On this 11th day of June, 1902, before me personally appeared C. H. Tweed, personally known to me to be the individual who subscribed the within instrument for and in behalf of the Pacific Mail Steamship Company, who, being by me duly sworn, did depose and say: That he resided in New York City; that he was the president of the said corporation; that he knew the corporate seal of the said corporation; that the seal affixed to the said instrument was such corporate seal, and that the said instrument was signed by him and sealed in behalf of the said corporation by authority of its board of directors; and the said C. H. Tweed acknowledged the said instrument to be the act and deed of the said corporation, and that the same was executed by said corporation freely and voluntarily for the purposes therein mentioned.

[Notarial seal.]

JOHN J. TIERNEY,

*Notary Public, Kings County.**Certificate filed in New York County, N. Y.*

STATE OF NEW YORK,

County of New York, ss:

On this 11th day of June, 1902, before me personally appeared Joseph Hellen, personally known to me to be the individual who subscribed the within instrument for and in behalf of the Pacific Mail Steamship Company, who, being by me duly sworn, did depose and say: That he resided in New York City; that he was the secretary of the said corporation; that he knew the corporate seal of the said corporation; that the seal affixed to the said instrument was such corporate seal, and that the said instrument was signed and sealed by him in behalf of the said corporation by authority of its board of directors; and the said Joseph Hellen acknowledged the said instrument to be the act and deed of the said corporation, and that the same was executed by said corporation freely and voluntarily for the purposes therein mentioned.

[Notarial seal.]

JOHN J. TIERNEY,

*Notary Public, Kings County.**Certificate filed in New York County, N. Y.*

(Extract from minutes of regular meeting of the board of directors of the Panama Railroad Company, held at the office of the company, No. 24 State street, New York, on Thursday, June 12, 1902.)

Resolved, That the contract and supplemental agreement between the Pacific Mail Steamship Company and this company, which have been approved by counsel and now submitted to this board, be, and the same are, hereby ratified, approved, and adopted, said agreements being as follows:

* * * * *

FEBRUARY 6, 1903.

REPORT OF JOSEPH L. BRISTOW.

149

And the president and secretary of this company are hereby fully authorized and empowered to execute, acknowledge, and deliver, for and in behalf of this company, and under its corporate seal, the agreements aforesaid, together with the several charter parties and stipulations provided by said agreements to be made and delivered at this time or any time hereafter by this company; said charter parties and stipulations to be in such form and terms as to the executive committee may seem proper, in order to carry out said agreements; and said officers are also fully authorized and empowered to do all acts and things which they may deem necessary or proper to effectuate the completion of said agreements and the full establishment of the same.

I hereby certify the foregoing to be a true and correct copy of the resolution adopted by the board of directors at its meeting held on June 12, 1902, duly called and held.

Witness my hand and official seal this 12th day of June, 1902.

[Seal of Panama Railroad Company.]

E. A. DRAKE, Secretary.

[Extract from the minutes of a special meeting of the board of directors of the Pacific Mail Steamship Company, held at No. 120 Broadway, in the city of New York, on Wednesday, June 11, 1902, at 3 o'clock p. m., a quorum being present and assenting.]

Resolved, That the agreement and the supplemental agreement between the Panama Railroad Company and this company, which are now submitted to the board, be, and the same are, hereby approved, and that the president and secretary of this company be, and they are hereby, authorized to execute said agreement and supplemental agreement under the corporate seal of this company and to acknowledge and deliver the same, and to execute, acknowledge, and deliver charter parties as prescribed in said agreement, and to do such other acts and things as they may deem necessary and proper to carry out said agreement and supplemental agreement.

Attest:

A true copy.

[Seal of Pacific Mail Steamship Company.]

JOS. HELLEN, Secretary.

THE PANAMA ROUTE.

Supplemental contract between the Panama Railroad Company and the Pacific Mail Steamship Company, dated June 11, 1902.

This memorandum of an agreement, made and entered into this 11th day of June, 1902, by and between the Panama Railroad Company, a corporation duly chartered by and organized under the laws of the State of New York, and hereinafter called the railroad company, party of the first part, and the Pacific Mail Steamship Company, also a corporation duly chartered by and organized under the laws of said State, and hereinafter called the steamship company, party of the second part, witnesseth: That

Whereas the parties hereto have entered into another agreement, bearing even date herewith, for the purpose of regulating the traffic arrangements between them, and hereinafter called the traffic agreement: and

Whereas a suit is now pending before the supreme court of the Republic of Colombia, brought by the attorney-general of said Republic against the railroad company, to compel the railroad company to grant to all carriers the privilege of issuing through bills of lading over its line of railroad, and to forbid it to give to any carrier special privileges or advantages in respect of transportation of goods over said railroad: and

Whereas carriers of goods and passengers from Panama to points upon the Pacific, north of said city, may enter into competition with the Panama route and may embarrass the operations of said route, and it may be necessary for the proper conduct of the business that other independent means of transportation from Panama to points on the Pacific, south of said city, should be provided,

Now, therefore, in consideration of the premises, and of the sum of \$1 by each of the parties hereto to the other in hand paid, and of the other good and valuable considerations, the receipt whereof is hereby acknowledged, and of the making of said traffic agreement, and of the various covenants of the respective parties hereinafter contained, the parties aforesaid have covenanted and agreed, and do hereby covenant and agree, to and with each other as follows:

First. The railroad company and the steamship company will cooperate in defending, or procuring the dismissal of, the said suit now pending before the supreme court of the Republic of Colombia, and will contribute in the proportion of 55 per cent by the railroad company and 45 per cent by the steamship company to the expenses hereafter and during the operation of said traffic agreement incurred for counsel in connection with the defense of said suit or with such efforts to procure the dismissal thereof.

Second. If the railroad company should not, on account of its inability to do so, or for any other reason, give to the steamship company the exclusive privilege of issuing through bills of lading over its line of railroad to and from the ports referred to in the first paragraph of Article I of said traffic agreement, in connection with the railroad company and each and every one of its Atlantic connecting lines, then the steamship company shall be entitled,

Boots and shoes, dry goods, per ton measurement.....	10.00
Flour (in 10-ton lots), per ton weight.....	20.00
Gunpowder, in metallic kegs, per pound.....	7.00
	1.00

at its option, to terminate said traffic agreement upon giving written notice to the railroad company of its election so to terminate the same.

Third. Upon the execution of the said traffic agreement by the parties hereto the railroad company is to forthwith give notice to all steamship lines running steamers between Panama and ports on the Pacific coast north thereof, other than the Pacific Mail Steamship Company, that upon the expiration of ninety days from the giving of such notice the railroad company will cease to through bill with the steamship lines so notified, or either or any of them, in respect of the transportation of merchandise on the Pacific coast north of Panama; and the parties hereto shall endeavor to procure arrangements between such other steamship lines so notified and the parties hereto for a division of territory under which the transportation of merchandise on the Pacific coast north of Panama shall be conducted by the Pacific Mail Steamship Company only, and the transportation of merchandise on the Pacific coast south of Panama shall be conducted by such other lines and for a mutual interchange of business at Panama between said Pacific Mail Steamship Company and such other steamship lines.

If on or before the expiration of ninety days from the giving of such notice such other steamship lines shall not have agreed to such division of territory and to such mutual interchange of business at Panama as above prescribed, but shall conduct the transportation of merchandise north of Panama, the Pacific Mail Steamship Company may, at its own expense, but otherwise in cooperation with the Panama Railroad Company, inaugurate a steamship line extending as far south as Valparaiso, and the Panama Railroad Company will extend to the Pacific Mail Steamship Company in respect of such line facilities in all respects equal to those which the railroad company may accord to any other line operating steamers south of Panama.

If, in consequence of the notification to be given as above prescribed from the railroad company to the other steamship lines, or such efforts to secure a division of territory as above provided, such other steamship lines shall withdraw their existing lines connecting Panama with points on the Pacific coast south thereof, then the Pacific Mail Steamship Company will, if the railroad company shall so request, forthwith make arrangements for providing for a line of steamers running south from Panama as far as Valparaiso, and shall within at most one hundred and twenty days after the making of such request establish and begin the actual operation of such line; and in that event the railroad company will thereafter and so long as such line shall be maintained and operated in a regular and efficient manner, so as to accommodate properly the traffic between said points and Panama in connection with the railroad, refuse and continue to refuse to through bill with other steamship lines in respect of business south of Panama, and will through bill exclusively with the Pacific Mail Steamship Company for such business, and will extend to the Pacific Mail Steamship Company facilities for such business in all respects equal to those which by the said traffic agreement are extended to the business conducted by the Pacific Mail Steamship Company north of Panama. Provided, however, that the running of such line of steamers south from Panama by the Pacific Mail Steamship Company and such exclusive through-billing privilege may be terminated upon one year's notice from the Pacific Mail Steamship Company to the Panama Railroad Company of its election to terminate the running of such line, or upon one year's notice from the Panama Railroad Company to the Pacific Mail Steamship Company of its election to terminate such exclusive through-billing privileges.

Fourth. It is mutually and expressly understood and agreed that if at any time during the continuance of said traffic agreement a majority of the shares of the railroad company or its railroad property shall be purchased or acquired by the United States of America, or by any person or persons representing it, or acting in its behalf, then either party hereto may give notice in writing to the other of its intention to terminate said traffic agreement, and at the expiration of six months from the giving of such notice the said traffic agreement, and the previous articles of this agreement, shall terminate, come to an end, and be utterly null and void thenceforth, anything in said traffic agreement or herein contained to the contrary notwithstanding.

In witness whereof each of the parties hereto has caused these presents to be signed by its president, attested by its secretary, and sealed with its corporate seal the day and year first hereinabove written.

PANAMA RAILROAD COMPANY,
By J. EDWARD SIMMONS,
President.

Attest:
E. A. DRAKE, *Secretary.*

PACIFIC MAIL STEAMSHIP COMPANY,
By CHARLES H. TWEED,
President.

Attest:
JOS. HELLER, *Secretary.*

Brands, boots and shoes refined petroleum.....do....	15.00
Cotton piece goods.....do....	18.00
Parcels not exceeding 2 cubic feet.....each..	3.00
New Orleans, January 1, 1904.	

REPORT OF JOSEPH L. BRISTOW.

151

STATE OF NEW YORK,
County of New York, ss:

On this 11th day of June, 1902, before me personally appeared J. Edward Simmons, personally known to me to be the individual who subscribed the within instrument for and in behalf of the Panama Railroad Company, who, being by me duly sworn, did depose and say: That he resided in New York City; that he was the president of the said corporation; that he knew the corporate seal of the said corporation; that the seal affixed to the said instrument was such corporate seal, and that the said instrument was signed by him and sealed in behalf of the said corporation by authority of its board of directors; and the said J. Edward Simmons acknowledged the said instrument to be the act and deed of the said corporation, and that the same was executed by said corporation freely and voluntarily for the purposes therein mentioned.

[Notarial seal.]

JOHN J. TIERNEY,
Notary Public, Kings County.
Certificate filed in New York County, N. Y.

STATE OF NEW YORK,
County of New York, ss:

On this 11th day of June, 1902, before me personally appeared E. A. Drake, personally known to me to be the individual who subscribed the within instrument for and in behalf of the Panama Railroad Company, who, being by me duly sworn, did depose and say: That he resided in New York City; that he was the secretary of the said corporation; that he knew the corporate seal of the said corporation; that the seal affixed to the said instrument was such corporate seal, and that the said instrument was signed and sealed by him in behalf of the said corporation by authority of its board of directors; and the said E. A. Drake acknowledged the said instrument to be the act and deed of the said corporation, and that the same was executed by said corporation freely and voluntarily for the purposes therein mentioned.

[Notarial seal.]

JOHN J. TIERNEY,
Notary Public, Kings County.
Certificate filed in New York County, N. Y.

STATE OF NEW YORK,
County of New York, ss:

On this 11th day of June, 1902, before me personally appeared C. H. Tweed, personally known to me to be the individual who subscribed the within instrument for and in behalf of the Pacific Mail Steamship Company, who, being by me duly sworn, did depose and say: That he resided in New York City; that he was the president of the said corporation; that he knew the corporate seal of the said corporation; that the seal affixed to the said instrument was such corporate seal, and that the said instrument was signed by him and sealed in behalf of the said corporation by authority of its board of directors; and the said C. H. Tweed acknowledged the said instrument to be the act and deed of the said corporation, and that the same was executed by said corporation freely and voluntarily for the purposes therein mentioned.

[Notarial seal.]

JOHN J. TIERNEY,
Notary Public, Kings County.
Certificate filed in New York County, N. Y.

STATE OF NEW YORK,
County of New York, ss:

On this 11th day of June, 1902, before me personally appeared Joseph Hellen, personally known to me to be the individual who subscribed the within instrument for and in behalf of the Pacific Mail Steamship Company, who, being by me duly sworn, did depose and say: That he resided in New York City; that he was the secretary of the said corporation; that he knew the corporate seal of the said corporation; that the seal affixed to the said instrument was such corporate seal, and that the said instrument was signed and sealed by him in behalf of the said corporation by authority of its board of directors; and the said Joseph Hellen acknowledged the said instrument to be the act and deed of the said corporation, and that the same was executed by said corporation freely and voluntarily for the purposes therein mentioned.

[Notarial seal.]

JOHN J. TIERNEY,
Notary Public, Kings County.
Certificate filed in New York County, N. Y.

[Extract from minutes of regular meeting of the board of directors of the Panama Railroad Company, held at the office of the company, No. 24 State street, New York, on Thursday, June 12, 1902.]

Resolved, That the contract and supplemental agreement between the Pacific Mail Steamship Company and this company, which have been approved by counsel and now submitted to this board, be, and the same are hereby, ratified, approved, and adopted, said agreements being as follows:

* * * * *

And the president and secretary of this company are hereby fully authorized and empowered to execute, acknowledge, and deliver, for and in behalf of this company, and under its corporate seal, the agreements aforesaid, together with the several charter parties and stipulations provided by said agreements to be made and delivered at this time or any time hereafter by this company; said charter parties and stipulations to be in such form and terms as to the executive committee may seem proper, in order to carry out said agreements; and said officers are also fully authorized and empowered to do all acts and things which they may deem necessary or proper to effectuate the completion of said agreements and the full establishment of the same.

I hereby certify the foregoing to be a true and correct copy of the resolution adopted by the board of directors at its meeting held on June 12, 1902, duly called and held.

Witness my hand and official seal this 12th day of June, 1902.

[Seal of Panama Railroad Company.]

E. A. DRAKE, *Secretary*.

[Extract from the minutes of a special meeting of the board of directors of the Pacific Mail Steamship Company, held at No. 120 Broadway, in the city of New York, on Wednesday, June 11, 1902, at 3 o'clock p. m., a quorum being present and assenting.]

Resolved, That the agreement and the supplemental agreement between the Panama Railroad Company and this company, which are now submitted to the board, be, and the same are hereby, approved, and that the president and secretary of this company be, and they are hereby, authorized to execute said agreement and supplemental agreement under the corporate seal of this company and to acknowledge and deliver the same, and to execute, acknowledge, and deliver charter parties as prescribed in said agreement, and to do such other acts and things as they may deem necessary and proper to carry out said agreement and supplemental agreement.

Attest:

A true copy.

[Seal of Pacific Mail Steamship Company.]

JOS. HELLEN, *Secretary*.

EXHIBIT B 38.

Question.—What are the terms of the traffic arrangements with the South American lines?

Answer.—They agree to maintain a service adequate to take care of all the traffic to and from Panama that seeks, or can be secured for, the Isthmus route. The interchange of traffic is governed by the terms of through bills of lading which have been agreed upon. The Pacific lines are to make through rates competitive with other routes down to a minimum of 30 shillings per ton to the ports in Europe and on this side of the Atlantic reached by the steamship lines connecting with our railroad from Colon, and the divisions of the through rates are made pro rata. They are to accept from us on similar terms the traffic which is carried to the Isthmus for shipment to the ports reached by their steamers. The arrangement can be canceled on ninety days' notice, but we are free at all times to make similar arrangements with other lines.

R. L. WALKER, *Traffic Manager*.

FEBRUARY 6, 1905.

EXHIBIT B 39.

Question.—Why do you not have traffic arrangements with other lines from Panama?

Answer.—We have thus far been unable to induce any other lines to embark in the traffic, and have not been approached by any other lines to interchange traffic with them.

R. L. WALKER, *Traffic Manager*.

FEBRUARY 6, 1905.

EXHIBIT B 40.

Question.—Give a brief comparison of rates charged for steamship transportation by the Panama Railroad Company, United Fruit Company, Ward Line, and other Atlantic companies where distances and conditions are similar.

Answer.—The rates by the United Fruit Company from New Orleans and the rates by our company from New York to the various destinations on the Isthmus route are the same. Attached is a comparison of rates from New York on nine staple articles to Colon, Habana, Livingston, etc. The service by American steamers to Vera Cruz, Progreso, and La Guaira is similar to our service, New York to Colon. Livingston has no direct service, and the high rates from New York to that point are divided between the American steamers of the Southern Pacific Company running to New Orleans, and the foreign vessels operated by the United Fruit Company, New Orleans to Livingston, and other ports on the east coast of Central America.

In this connection the inclosed tariff of Messrs. Fredk. Leyland & Co. (1900) (Limited) dated Liverpool, June 15, 1901, may be of interest, as their rates to Colon are compared with their rates to other ports about the Caribbean Sea and the Gulf of Mexico. It will be noted that our rates from New York to Colon are in each instance less than the rates from Europe to Colon. Perhaps the following tariffs from New York may also be of interest:

New York and Porto Rico Steamship Company, January 2, 1905.

Red "D" Line, corrected to January 1, 1903.

Hamburg-American Line, Atlas Line Service, in effect July 1, 1903.

Southern Pacific Company, in connection with the United Fruit Company, No. 706, in effect January 1, 1905.

R. L. WALKER, *Traffic Manager.*

Comparison of rates from New York.

Articles.	To Colon.	To Habana and Santiago.	To Livingston.	To San Juan.	To Kingston.	To Vera Cruz.	To Progreso.	To La Guaira.
Kerosene oil.....per case..	\$0.25	\$0.15	\$0.60	\$0.12	\$0.16	\$0.25	\$0.25	\$0.25
Flour.....per barrel..	.81	.65	1.28	.30	.40	.75	.70	.50
Potatoes.....do.....	.81	.65	1.28	.50	.50	.88	.88	.50
Salt.....per 100 lbs..	.25	.25	.60	.35	.20	.25	.30	.35
Dry goods...per cubic foot..	.12	.10	.60	.14	.08	.15	.17	.15
Lumber.....per M feet..	10.00	4.00	15.00	5.00	6.50	8.00	8.00	9.00
Pork.....per barrel..	.87	.70	1.28	.60	.50	.90	1.40	.75
Furniture...per cubic foot..	.12	.10	.30	.16	.08	.12	.12	.15
Lard.....per 100 lbs..	.25	.20	.60	.25	.25	.30	.30	.25

^a Or 12 cents per cubic foot.

FEBRUARY 6, 1905.

Special rate, (with usual additions) for Barranquilla and Calamar.	Unit.	La Guayra, Puerto Cabello, Curacao, St. Thomas.	Coro, Maracaibo.	Savanna, Carthagena.
Beer...	Per 40 cubic feet.	20/- nett.	27/6 nett.	20/- and 10%.
Bottles (empty) demijohns (empty), earthenware and glassware (common).	do.	20/- nett.	27/6 nett.	25/- and 10%.
Paper (packing, printing, wood, and straw).	Per 20 cwt. gross.	18/- nett.	25/- nett.	25/- and 10%.
Coal and coke in sacks; iron and steel wire.	do.	17/6 and 10%.	25/- nett.	20/- and 10%.
Cement in casks.	do.	50/- and 10%.	60/- and 10%.	50/- and 10%.
Iron pots, stoves, grates, and ovens.	do.	18/- nett.	25/- nett.	20/- and 10%.
Rice in bags.	do.	18/- nett.	25/- nett.	20/- and 10%.

^b Coro. Cost of consular visé to be divided amongst shippers.

^c Light-house dues, 1/- per ton; tonnage tax, 7/- per ton.

FREDR. LEYLAND & Co. (1900), LIMITED,
27 James Street, Liverpool, 15th June, 1901.

New York and Porto Rico Steamship Company, freight tariff.

[Subject to change without notice. To San Juan, Ponce, and Mayaguez, and when sufficient cargo offers to Aguadilla, Arroyo, Humacao, Fajardo, and Arecibo. Cargo for Arecibo will pay 10 per cent in addition to these rates. When steamer does not call at any of the above ports goods may be transhipped by coast steamer at San Juan (see transshipment rate). Freight must be prepaid. Five per cent primage on all freight. No freight received without permit, which can be had on application.]

New York, January 2, 1905.

Acid, in carboys, on deck.....	per carboy	\$3.00
Acid, in drums, on deck.....	per cubic foot	.20
Beans and peas, in bags or barrels.....	per 100 pounds	.20
Beer, in barrels.....	per barrel	.75
Bran and feed.....	per 100 pounds	.30
Bacon, butter, and boxed provisions.....	per cubic foot	.12
Brooms.....	do.	.12
Boots and shoes.....	do.	.16
Beef and tongue, in barrels and half barrels.....	per 100 pounds	.20
Box shooks, empty boxes.....	per cubic foot	.08
Cornmeal, in bags.....	per bag	.30
Corn and oats.....	per bushel	.10
Crackers, in barrels.....	per barrel	.50
Crackers, soda, in boxes.....	per cubic foot	.08
Crackers.....	do.	.12
Chairs, common.....	do.	.12
Carriages.....	do.	.16
Cement, in barrels.....	per 100 pounds	.10
Cots and wire mattresses.....	per cubic foot	.10
Carriage woodwork, wheels, etc.....	do.	.10
Cheese and candles.....	do.	.12
Cartridges.....	per pound	.03
Coal, in bags.....	per ton	4.00
Dry goods, cotton goods, notions, etc.....	per cubic foot	.14
Drugs, druggists' sundries, chemicals, etc.....	do.	.20
Flour, in customary bags or barrels.....	per bag or barrel	.30
Fruit and vegetables.....	per barrel	.50
Fish, in drums, 4 quintals.....	per drum	1.00
Fish, in boxes.....	per cubic foot	.08
Fish, pickled, in barrels.....	per 100 pounds	.20
Fertilizer, in bags.....	do.	.20
Fire clay.....	do.	.20
Fire brick.....	do.	.20
Furniture.....	per cubic foot	.16
Glassware, crockery, and earthenware.....	do.	.10
Grease.....	per 100 pounds	.30
Grindstones.....	do.	.25
Hams.....	per cubic foot	.12
Hay, in bales.....	do.	.08
Hoops.....	per 1,000 hoops	5.00
Household effects in use.....	per cubic foot	.12
Hats.....	do.	.14
Iron, in bars, sheets.....	per 100 pounds	.30
Iron castings, angle iron, etc.....	do.	.35
Iron corrugated roofing, in sheets.....	do.	.20
Lard, in tierces and barrels.....	do.	.25
Lard, in cases.....	per cubic foot	.12
Lampware.....	do.	.12
Lumber, white pine.....	per M feet	5.00
Lumber, yellow pine.....	do.	8.00
Matches, in tin-lined cases.....	per cubic foot	.12
Match splints, in cases, strawboard.....	do.	.08
Machinery, pieces or packages under 2,000 pounds.....	per 100 pounds	.35
2,000 to 3,000 pounds per piece or package.....	do.	.50
3,000 to 4,000 pounds per piece or package.....	do.	.60
4,000 to 5,000 pounds per piece or package.....	do.	.75
5,000 to 6,000 pounds per piece or package.....	do.	1.00
Over 6,000 pounds. ^a		

^a Special.

Machinery, measurement rate at ship's option.....	per cubic foot..	\$0.16
Millinery, ribbons, etc.....	do.....	.16
Nails.....	per 100 pounds..	.25
Nuts and bolts.....	do.....	.35
Oil, lubricating.....	per cubic foot..	.13
Pork.....	per barrel..	.60
Paper (straw), in bundles.....	per cubic foot..	.08
Paper bags.....	do.....	.08
Paper, news print.....	do.....	.12
Pepper, in bags.....	do.....	.12
Paint.....	per 100 pounds..	.25
Petroleum.....	per cubic foot..	.06
Pipe, iron.....	per 100 pounds..	.30
Pipe, spiral.....	per cubic foot..	.12
Plated ware, cheap jewelry, etc.....	do.....	.20
Piles, spruce.....	per running foot..	.10
Piles, creosoted.....	do.....	.15
Rice, in bags.....	per 100 pounds..	.20
Rosin, tar, pitch, plaster, sand, sulphur, tallow, marble.....	do.....	.25
Rope and twine.....	per cubic foot..	.16
Rails.....	per 100 pounds..	.30
Stationery.....	per cubic foot..	.16
Safes, under 2,000 pounds.....	per 100 pounds..	
Safes, over 2,000 pounds.....	per pound..	.01
Starch, maizena, and miscellaneous provisions.....	per cubic foot..	.12
Soup paste, macaroni, in boxes.....	do.....	.10
Starch, in bags.....	per 100 pounds..	.25
Shooks and heads.....	per S. & H..	.30
Soap, laundry.....	per cubic foot..	.12
Soap, fancy.....	do.....	.20
Sewing machines.....	do.....	.16
Specie. ^a		
Turpentine, varnish, etc.....	per cubic foot..	.13
Transshipment rate, additional:		
Weight goods.....	per 100 pounds..	.10
Measurement goods.....	per cubic foot..	.06
Per bag or barrel of 200 pounds.....	each.....	.15
Whisky, wines, etc.....	per cubic foot..	.12
Wire, barbed.....	per 100 pounds..	.25
Woodenware and light hardware.....	per cubic foot..	.16
Measurement rate unclassified.....	do.....	.16
Weight rate unclassified.....	per 100 pounds..	.35
Minimum bill of lading.....		3.00
Landing charges at San Juan, prepaid, 2½ cents per 100 pounds, or 1 cent per cubic foot.		
Lighterage charges at Ponce, prepaid, for packages under 2,000 pounds:		
Provisions.....	per 100 pounds..	\$0.04
Dry goods, iron, hardware, bags, etc.....	do.....	.08
Lumber, white pine.....	per M feet..	1.00
Yellow pine.....	do.....	1.25
Cement.....	per barrel..	.12½

Lighterage charges at other ports payable by consignees of goods.

Powder, dynamite, explosives, and fireworks taken on steamers that do not carry passengers, and under special permit.

Coal in hogsheads, lumber, shoos, hoops, rosin, tar, pitch, etc., at steamer's option, under or on deck. Locomotives, machinery, and other heavy goods will be taken at special rates.

Freight must be prepaid upon signing bills of lading.

Goods taken by weight, measurement, or valuation, at the option of the steamship company, subject to all the conditions in its bill of lading. When two or more classes of merchandise are contained in one package, freight will be charged at the rate applicable to the highest class.

^a One-fourth of 1 per cent.

Red "D" Line of steamships, freight tariff to La Guaira and Puerto Cabello.

[Corrected January 1, 1903.]

Flour, crackers, meal, and vegetables, in flour barrels.....	per barrel..	\$0. 50
Flour, in bags.....	per 100 pounds..	. 25
Beef and pork.....	per barrel..	. 75
Beef and pork, in half barrels.....	per half barrel..	. 40
Kerosene, in barrels.....	per barrel..	1. 00
Kerosene, in cases of 10 gallons.....	per case..	. 25
Lard, in tierces of 450 pounds.....	per 100 pounds..	. 25
Lard, in barrels of 250 pounds.....	do.....	. 25
Lard, in firkins of 120 pounds.....	do.....	. 30
Lard, in kegs of 60 pounds.....	do.....	. 30
Lard, in tins, loose, 20-25 pounds.....	per tin..	. 20
Lard, in tins, loose, 10-12 pounds.....	do.....	. 15
Lard, in tins, loose, 5 pounds.....	do.....	. 10
Lard, in cases or crates.....	per cubic foot..	. 12
Butter, in cases or crates.....	do.....	. 15
Biscuits, in tins of 8-10 pounds, loose.....	per tin..	. 12
Biscuits, in cases, crates, or bundles.....	per cubic foot..	. 15
Corn, in bags of 2 bushels.....	per bag..	. 25
Beans and peas, in bags of 2 bushels.....	do.....	. 30
Rosin, rice, cement, and tallow.....	per 100 pounds..	. 20
Cloves, pepper, seeds, and spices.....	per pound..	. 00½
Hams, in tierces.....	per pound..	. 00½
Rope.....	per 100 pounds..	. 30
Brooms.....	per dozen..	. 40
Shovels.....	per cubic foot..	. 12
Cassia.....	do.....	. 15
Bran.....	per 100 pounds..	. 50
Barbed wire.....	do.....	. 30
Dry goods.....	per cubic foot..	. 15
Lumber, pitch pine, flooring boards.....	per M feet..	12. 00
Lumber, pitch pine, planks, even lengths.....	do.....	10. 00
Lumber, white pine.....	do.....	9. 00
Beer, in barrels, 9/2 c/f.....	per barrel..	1. 00
Beer, in cases.....	per cubic foot..	. 12
Cigarettes and tobacco.....	do.....	. 15
Oats.....	per 100 pounds..	. 55
Paper.....	per cubic foot..	. 15
Specie, gold, net.....	(a).....	
Imitation jewelry.....	(b).....	
Weight goods, not specified.....	per 100 pounds..	. 35
Measurement goods, not specified.....	per cubic foot..	. 15

All with 5 per cent primage, and to La Guaira, in addition, 4 cents per 100 kilos wharf dues. Boilers, machinery, cartridges, jewelry, and all other goods of a dangerous nature or of unusual weight, bulk, or value, at special rates. No bills of lading signed for less than \$3. Freight payable in advance.

BOULTON, BLISS & DALLETT,
General Managers, 135 Front Street, New York.

^a One-half per cent.

^b One and one-half per cent.

REPORT OF JOSEPH L. BRISTOW.

159

Red "D" Line of steamships. Freight tariff to Curaçao, Maracaibo, and La Vela de Coro.

[Corrected January 1, 1903.]

	Curaçao.	Maracaibo	De Coro.
Flour, crackers, meal, and vegetables, in flour barrels, per barrel..	\$0.40	\$0.60	\$0.60
Flour, in bags.....per 100 pounds..	.20	.30	.30
Beef and pork.....per barrel..	.70	.90	.90
Beef and pork, in half barrels.....per half barrel..	.40	.50	.50
Kerosene, in barrels.....per barrel..	1.00	1.25	1.25
Kerosene, in cases of 10 gallons.....per case..	.10	.30	.30
Lard, in tierces of 450 pounds.....per 100 pounds..	.20	.30	.30
Lard, in barrels of 250 pounds.....do.....	.20	.30	.30
Lard, in firkins of 120 pounds.....do.....	.25	.35	.40
Lard, in kegs of 60 pounds.....do.....	.25	.40	.40
Lard, in tins, loose, 20 to 25 pounds.....per tin..	.20	.20	.20
Lard, in tins, loose, 10 to 12 pounds.....do.....	.12	.15	.15
Lard, in tins, loose, 5 pounds.....do.....	.07	.10	.10
Lard, in cases or crates.....per cubic foot..	.10	.15	.15
Butter, in cases or crates.....do.....	.10	.15	.15
Biscuits, in tins of 8 to 10 pounds, loose.....per tin..	.10	.15	.15
Biscuits, in cases, crates, or bundles.....per cubic foot..	.10	.15	.15
Corn, in bags of 2 bushels.....per bag.....	.25	.30	.30
Beans and peas, in bags of 2 bushels.....do.....	.25	.35	.35
Rosin, rice, cement, and tallow.....per 100 pounds..	.30	.30	.30
Cloves, pepper, seeds, and spices.....per pound..	.003	.003	.003
Hams, in tierces.....do.....	.003	.003	.003
Rope.....per 100 pounds..	.25	.35	.35
Brooms.....per dozen..	.40	.40	.40
Shovels.....per cubic foot..	.10	.15	.15
Cassia.....do.....	.10	.15	.15
Bran.....per 100 pounds..	.40	.60	.60
Barbed wire.....do.....	.20	.35	.35
Dry goods.....per cubic foot..	.15	.20	.20
Lumber, pitch pine, flooring boards.....per M feet..	12.00	12.00	12.00
Lumber, pitch pine, planks, even lengths.....do.....	10.00	10.00	10.00
Lumber, white pine.....do.....	9.00	9.00	9.00
Beer, in barrels, 9.2 c.f.....per barrel..	.95	1.25	1.25
Beer, in cases.....per cubic foot..	.10	.15	.15
Cigarettes and tobacco.....do.....	.12	.20	.20
Oats.....per 100 pounds..	.30	.60	.60
Paper.....per cubic foot..	.10	.15	.15
Specie, gold, net.....a		a	(a)
Imitation jewelry.....b		b	(b)
Weight goods, not specified.....per 100 pounds..	.30	.40	.40
Measurement goods, not specified.....per cubic foot..	.10	.20	.20

a One-half per cent.

b One and one-half per cent.

All with 5 per cent primage. Boilers, machinery, cartridges, jewelry, and all other goods of a dangerous nature or of unusual weight, bulk, or value, at special rates. No bills of lading signed for less than \$3. Freight payable in advance.

BOULTON, BLISS & DALLETT,
General Managers, 135 Front Street, New York.

Hamburg American Line, Atlas Line service. Freight tariff outwards from New York to Jamaica, Colombia, and Central America.

[In effect July 1, 1903. Subject to change without notice. Pim, Forwood & Kellock, agents, 17 State street, New York.]

Goods.	Kingston.	Jamaica outports.	Colombia.	Greytown.	Port Limon.
Flour, meal, bread, and feed, in flour barrels.....per barrel..	\$0.40	\$0.60	\$0.60	\$0.85	\$0.80
Flour, meal, bread, and feed, in flour barrels.....per half barrel..	.25	.35	.35	.50	.40
Flour, in bags.....per 100 pounds..	.20	.30	.21	.....	.204
Beef, pork, tongues, and fish.....per barrel..	.50	.70	.75	1.00	.90
Beef, pork, tongues, and fish, per half barrel.....	.30	.40	.45	.60	.50
Beef, pork, tongues, and fish, per quarter barrel.....	.20	.25	.....	.....	.....
Vegetables, in flour barrels.....per barrel..	.60	.60	.60	.85	.80
Lard, butter, oleomargarine, and cheese, per 100 pounds.....	.25	.35	.30	.424	.40
Tallow, grease, paraffin, stearin, caustic soda, soda ash, and silix, per 100 pounds..	.20	.30	.30	.424	.35
Soap, weight or measurement, at ship's option.....per cubic foot..	.07	.12	.12	.17	.16

Hamburg American Line, Atlas Line Service. Freight tariff outwards from New York to Jamaica, Columbia and Central America—Continued.

Goods.	Kingston.	Jamaica outports.	Columbia.	Greytown.	Port Limon.
Soap, weight or measurement, at ship's option..... per 100 pounds.....	\$0.18	\$0.30	\$0.30	\$0.42½	\$0.40
Fish, codfish, in drums..... per quintal.....	.33½	.55			
Fish, codfish, herrings, and bloaters, in boxes..... per cubic foot.....	.08	.12	.12	.17	.16
Tar, pitch, rosin, cement, and plaster; lime (on deck)..... per 100 pounds.....	.20	.30	¢.75	¢1.00	¢.95
Hay, in bales, compressed, lots of 5 tons, per 100 pounds.....	.40	.50	¢.08		
Corn..... per 100 pounds.....	.35	.30	.30	.42½	.40
Corn, in 2-bushel bags..... per bag.....	.20	.30			
Oats and feed..... per 100 pounds.....	.25	.35	.30	.50	.50
Bran, in bags..... do.....	.45	.55	.75		
Rice..... do.....	.17½	.30	.30	.12½	.10
Barb wire..... do.....	.20	.30	.25	.15	.15
Brooms, shovels, boots and shoes, candles, furniture, bottled beer, carriages, canned goods, lamps, glassware, rope, twine, trunks, paper, tea, gunny bags, per cubic foot.....	.08	.12	.12	.17	.16
Beer, in barrels..... per cubic foot.....	.08			¢.90	¢.80
Hardware, weight or measurement, at ship's option..... per cubic foot.....		.12	.12	.17	.16
Hardware, weight or measurement, at ship's option..... per 100 pounds.....		.30	.30	.42½	.40
Matt..... per cubic foot.....		.30	.30	.42½	.40
Beans and peas..... per 100 pounds.....	.30	.30	.30	.42½	.40
Kerosene, in cases..... per cubic foot.....	.08	.12	.10	.17	.16
Kerosene and cotton seed oil, in barrels, per barrel.....	1.00				1.50
Heavy oils, in barrels..... per barrel.....		.12	.12	.17	
Heavy oils, in barrels..... per cubic foot.....	.25	.15	.10	.42½	.40
Sugar..... per 100 pounds.....		.30	.21	.42½	.40
Salt, in barrels and sacks..... per 100 pounds.....			.21	.42½	.40
Marble dust..... do.....			.21		
Matches (on deck)..... per cubic foot.....	.08	.12	.12	.17	.16
Measurement goods, not enumerated, per cubic foot.....	.08	.12	.12	.17	.16
Weight goods, not enumerated, per 100 pounds.....	.20	.30	.40	.42½	.40
Shooks (puncheons and hogsheds), per shook.....	.40	.50			
Shooks (box) and shingles..... per cubic foot.....	.07	.12			
Shooks (barrel), number of barrels packages make up..... per cubic foot.....	.07	.12			
Shooks, orange barrels, number of barrels packages make up..... per barrel.....	.05				
Lumber (ordinary)..... per M foot.....	6.50	8.50	11.70	12.00	12.00
Bricks..... per M.....					
Fire-bricks..... do.....		9.50			
Safts (small)..... per 100 pounds.....					
Benzine, gasoline, and naphtha, in 5-gallon cans (cased), acids, ammonia, ether, and fireworks (all on deck)..... per cubic foot.....	.20	(c)	.20	.25	.25
Gasoline and naphtha, in 10-gallon drums (cased), on deck..... per cubic foot.....			.30		
Powder, dynamite, explosives, and fuse, gross weight..... per pound.....	.03	(c)	.04	.04	.04
Cartridges (for firearms), gross weight, per pound.....	.00½	(c)	.00½	.00½	.00½
Acids, in carboys (on deck)..... per carboy.....	2.50	(c)	2.50	2.50	2.50
Acid, in large metal drums (on deck), per drum.....	10.00	(c)	(d)	1	(4)
Carbonic acid gas (on deck), in cylinders, not over 100 pounds weight, per cylinder.....	.60				
Specie and valuables, per ad valorem (net).....	¢.0½	¢.0½	¢.0½	¢.1	¢.1
Machinery, boilers, etc.....					
Cattle..... per head.....	40.00	(c)	75.00	85.00	75.00
Horses..... do.....	50.00	(c)	75.00	85.00	75.00
Sheep..... do.....	15.00	(c)	25.00	35.00	25.00
Hogs..... do.....	20.00	(c)	25.00	35.00	25.00
Chickens and fowls (in crates of not over 4 in one crate)..... per crate.....	4.00	(c)	5.00	5.00	5.00

¢ Per barrel.

¢ Per cubic foot.

c No deck cargo, live stock, or explosives carried to Jamaica outports via Kingston.

d Large, \$10; smaller, \$5 and \$2.50

¢ Per cent.

/ Special agreement.

All rates bear 10 per cent primage additional except those on specie and live stock.
 Kingston freights payable at New York or at destination at shipper's option; all other
 freights and dues must be prepaid in exchange for bill of lading.
 (On shipments to Colombian ports, following charges must be prepaid with the freight:

Stamp duty on each set of bills of lading.....	\$2.00
Light-house dues.....	per 1,000 kilos..... .00
Tonnage dues.....	do..... .30
Manifest fee.....	per package..... .01

Southern Pacific Company, Morgan steamship line, in connection with the United Fruit Company's steamship line. Freight tariff No. 706, corrected (cancels tariff No. 524), on general merchandise.

[From New York, N. Y., to Puerto Cortez, Honduras; Punta Gorda and Belize, British Honduras; Livingston and Puerto Barrios, Guatemala, Central America. Effective January 12, 1905.]

Advertising matter.....	per cubic foot.....	20.30
Ale and beer, bottled, in casks.....	per cask.....	1.28
Ale and beer, bottled, in cases.....	per cubic foot.....	.30
Agricultural implements.....	do.....	.30
Acids, released.....	per carboy.....	4.50
Acids, released, drums.....	each.....	15.00
Axes, anvils, anchors.....	per 100 pounds.....	.60
Apples, onions, potatoes.....	per barrel.....	1.28
Agateware.....	per cubic foot.....	.30
Bacon and green meats.....	per 100 pounds.....	.60
Beef and pork.....	per barrel.....	1.28
Beef and pork.....	per half barrel.....	.75
Boots and shoes.....	per cubic foot.....	.30
Butter and cheese.....	per 100 pounds.....	.60
Brooms.....	per cubic foot.....	.30
Bricks, ^a	per cubic foot.....	.30
Buckets and tubs (galvanized).....	per cubic foot.....	.30
Buckets and tubs (wooden).....	do.....	.30
Beans, peas, and corn.....	per 100 pounds.....	.60
Bran and oats.....	per cubic foot.....	.30
Barbed wire.....	per 100 pounds.....	.60
Blinds, sash, and factory work.....	per cubic foot.....	.30
Boilers, ^a	per cubic foot.....	.30
Cabbage, in crates.....	do.....	.30
Cement.....	per barrel.....	1.28
Crockery, in crates and boxes.....	per cubic foot.....	.30
Crockery, in barrels.....	per barrel.....	1.28
Coal, in sacks only, ^a	per barrel.....	1.28
Canned goods, in cases.....	per cubic foot.....	.30
Cordage and rope.....	do.....	.30
Cisterns (wood), k. d. and packed.....	do.....	.30
Crackers.....	per barrel.....	1.28
Crackers.....	per half barrel.....	.68
Crackers, in boxes.....	per cubic foot.....	.30
Carts, hand.....	do.....	.30
Coffee.....	per 100 pounds.....	.60
Cigars and cigarettes.....	per cubic foot.....	.30
Carriages, children, k. d. and packed.....	do.....	.30
Carrages, ^a	do.....	.30
Cots.....	do.....	.30
Castings.....	per 100 pounds.....	.60
Corn meal.....	per barrel.....	1.28
Demijohns, m. t. o. r.....	per gallon.....	.05
Doors and factory work.....	per cubic foot.....	.30
Drugs.....	do.....	.30
Dry goods.....	do.....	.60
Flour.....	per barrel.....	1.28
Flour.....	per half barrel.....	.68
Flour, sacks.....	per 100 pounds.....	.60

^a Special.

Fish.....	per kit.	\$0.30
Fish, dry, boxes and drums.....	per 100 pounds.	.60
Fish, pickled.....	per barrel.	1.28
Fish, pickled.....	per half barrel.	.75
Furniture, packed.....	per cubic foot.	.30
Furniture, common, packed.....	do.	.30
Glassware, packed, cases, o. r.....	do.	.30
Glassware, barrel, o. r.....	per barrel.	1.28
Gasoline, in tanks. ^a		
Grindstones.....	per 100 pounds.	.60
Groceries, n. o. s.....	per cubic foot.	.30
Hard ware, heavy.....	per 100 pounds.	.60
Hay, bales.....	do.	.60
Hoes, rakes, shovels, and spades, in bundles.....	per cubic foot.	.30
Hams.....	per 100 pounds.	.30
Hollow ware.....	per cubic foot.	.30
Hats.....	do.	.30
Household goods, packed.....	do.	.30
Ice.....	per hogshead.	3.38
Iron, sheet, bar, band, and rod.....	per 100 pounds.	.60
Iron safes. ^a		
Kraut.....	per barrel.	1.28
Lumber.....	per thousand.	15.00
Lard.....	per 100 pounds.	.60
Lead and zinc.....	do.	.60
Lime.....	per barrel.	1.28
Leather.....	per cubic foot.	.30
Live stock. ^a		
Marble, packed, o. r. b.....	per 100 pounds.	.60
Machinery, heavy. ^a		
Machinery, light, boxed.....	per cubic foot.	.30
Mirrors and glass, framed, boxed, o. r.....	do.	.30
Molasses.....	per gallon.	.06
Measurement freight, n. o. s.....	per cubic foot.	.30
Mattresses, packed.....	do.	.30
Nails, spikes, and horseshoes.....	per keg.	.60
Nails, boxes.....	per 100 pounds.	.60
Ox bows.....	per dozen.	.15
Oil, burning and lubricating.....	per gallon.	.06
Oakum.....	per cubic foot.	.30
Paper, wrapping.....	do.	.30
Paint, in barrels, wet.....	per gallon.	.06
Paint, kegs, cases, and cans.....	per 100 pounds.	.60
Poultry, in coops.....	per cubic foot.	.30
Pickets. ^a		
Pitch, rosin, and tar.....	per 100 pounds.	.60
Pigs' feet.....	per barrel.	1.28
Pepper.....	per cubic foot.	.30
Rice.....	per 100 pounds.	.60
Stoves, o. r.....	per cubic foot.	.30
Stove trimmings.....	do.	.30
Sash, glazed, o. r.....	do.	.30
Shingles.....	per thousand.	4.50
Sugar.....	per 100 pounds.	.60
Scales.....	per cubic foot.	.30
Sewing machines, k. d., and packed.....	do.	.30
Salt.....	per 100 pounds.	.60
Specie.....	per cent American valuation.	.01
Shot.....	per 100 pounds.	.60
Show cases, packed, o. r.....	per cubic foot.	.30
Soap.....	do.	.30
Tobacco, plug.....	per 100 pounds.	.60
Tobacco, smoking.....	per cubic foot.	.30
Tinware.....	do.	.30
Turpentine.....	per gallon.	.06
Vegetables, packed, barrel.....	per barrel.	1.28

bills of lading over its line or railroad to and from the ports referred to in the first paragraph of Article I of said traffic agreement, in connection with the railroad company and each and every one of its Atlantic connecting lines, then the steamship company shall be entitled,

REPORT OF JOSEPH L. BRISTOW.

163

Vinegar.....	per gallon..	\$0.06
Whisky and wine, barrel.....	do.....	.08
Whisky and wines, cases.....	per cubic foot..	.30
Wire, spools; wire, rope.....	per 100 pounds..	.60
Wooden and willow ware.....	per cubic foot..	.30
Wheelbarrows, k. d.....	do.....	.30
Wagons, per cubic foot.....		
Weight goods, n. o. s.....	per 100 pounds..	.60
Yaws.....		

* Ship's option, weight or measurement. Freight prepaid in United States currency. No shipment received for less than \$3.15. Above rates do not include insurance. Primage, 5 per cent additional.

NOTE.—Rates set forth herein will not apply on heavy pieces weighing 1 ton or over each. For rates on heavy pieces weighing 1 ton or over apply for rates.

M. J. DEMESSEY, T. M.,
United Fruit Company, New Orleans, La.

C. S. FAY, G. F. A., New Orleans, La.

Issued by

L. J. SPENCER, G. F. A.,
Southern Pacific Company, 340 Broadway, New York.

New York, January 11, 1906.

EXHIBIT B-41.

Question.—If possible, give in general terms a comparison of the rates charged by the Pacific Mail Steamship Company and other steamship companies operated on the Pacific coasts of North and South America, where distances and conditions are similar.

Answer.—We submit special rate sheet No. 1, issued by the Pacific Mail Steamship Company, San Francisco, November 1, 1902, showing rates from San Francisco to the west coast ports of Mexico, Central America, and Panama. This is the only printed tariff for the Pacific coast of which we have knowledge. We are, therefore, unable to make any comparison between it and the rates made by other lines.

R. L. WALKER, Traffic Manager

FEBRUARY 6, 1905.

Pacific Mail Steamship Company, Panama Line—Special rate sheet No. 1. Special rates of freight from San Francisco to Mexican and Central American ports.

Payable in United States gold coin. The ton weight to be 2,000 pounds and the ton measurement to be 40 cubic feet.)

Articles.	Mazatlan	San Blas	Ocosingo, Champerico, San José de G., Acapulco, La Libertad, La Unión, Amapala, Corinto, San Juan del Sur, Punta Arenas, Panama.
Add carboys (on deck), weight or measurement S/O.....	\$15.00	\$15.00	\$15.00
Ice (on deck), tanks, weight or measurement S/O.....	0	10.00	15.00
Beer and aerated waters, cases or barrels, measurement.....	1.00	1.00	7.00
Boilers under 2,000 pounds, weight or measurement S/O.....	1.00	6.00	8.00
Boilers 2,000 pounds to 6,000 pounds, weight or measurement S/O.....	5.00	1.00	12.00
Boilers 6,000 pounds to 12,000 pounds, weight or measurement S/O.....	12.00	15.00	20.00
Brass, weight.....	7.50	9.00	12.00
Barley, weight.....	5.00	7.00	10.00
Beans and peas (dried in sacks), weight.....	5.00	6.00	7.00
Cattle (in stalls), each.....	30.00	40.00	50.00
Corn, weight.....	1.00	6.00	7.00
Cement, weight.....	5.00	6.00	7.00
Coal (in bags in lots of less than 100 tons), weight.....	4.00	5.00	6.00
Doors, sash, and blinds (to be crated or boxed), measurement.....	5.00	6.00	8.00
Flour in sacks, weight.....	5.00	6.00	8.00
Fire brick, weight.....	5.00	6.00	8.00

* Special.

Pacific Mail Steamship Company, Panama Line—Special rate sheet No. 4—Special rates of freight from San Francisco to Mexican and Central American ports—Continued.

Articles.	Mazatlan.	San Blas, Manzanillo, Acapulco.	Ocos, Cham- perico, San José De G. Acajula, La Libertad, La Union, Ama- pala, Corinto, San Juan del Sur, Punta Arenas, Pan- ama.
Flooring, surfaced boards, and moldings (to be crated), mea- surement.....	\$4.50	\$5.50	\$7.00
Horses (in stalls), each.....	40.00	50.00	60.00
Hay, compressed, 18 pounds per cubic foot, weight.....	10.00	12.00	16.00
Iron, bar, rod, hoop, corrugated, and pipe in bundles, weight.....	5.00	7.00	9.00
Iron, nails, rivets, bolts, cases or kegs, weight.....	5.00	6.00	8.00
Jewelry, value.....	a 1½	a 1½	a 1½
Laths, per 1,000.....	2.00	2.50	3.00
Lumber, not exceeding 8 by 8 or 6 by 10 by 30, per 1,000.....	8.00	10.00	12.00
Lumber, exceeding above dimensions.....	(b)	(b)	(b)
Machinery, weight or measurement S/O.....	(c)	(c)	(c)
Malt, measure ment.....	5.00	6.00	8.00
Oats, weight.....	7.50	9.00	12.00
Oil (coal, on deck), measurement.....	5.00	7.00	10.00
Opium, value.....	a 1½	a 1½	a 1½
Potatoes, weight.....	5.00	6.00	8.00
Powder, black, weight.....	30.00	30.00	30.00
Rice, weight.....	5.00	6.00	8.00
Sheep (live), each.....	4.00	4.00	5.00
Bales, weight or measurement S/O.....	(c)	(c)	(c)
Salt, weight.....	5.00	6.00	7.00
Shingles, per 1,000.....	1.50	1.75	2.00
Silk goods, measurement.....	12.00	15.00	20.00
Shooks, measurement.....	4.00	5.00	6.00
Treasure, value.....	a 1	a 1	a 1
Window and door frames, measurement.....	5.00	6.00	8.00
Wine (California, in cases and barrels), measurement.....	5.00	6.00	8.00
Wire (barbed), measurement.....	5.00	6.00	7.00
Wheat, weight.....	5.00	6.00	7.00
General merchandise, n. o. s., weight or measurement S/O.....	5.00	6.00	8.00

a Per cent.

b Special agreement.

c Same as boilers.

Minimum bill of lading to Mazatlan, \$2; to San Blas, Manzanillo, and Acapulco, \$2.50; to ports south of Acapulco, \$3.

This special rate sheet does not apply to articles of unusual bulk or weight, which are taken only by special agreement. Live stock taken by written contract only, forms of which can be obtained at the company's office. Freight on all live stock and perishable articles must be prepaid; also all freight on cargo to all ports except Mazatlan and Panama.

Where goods are consigned to order, the name of party to be notified must be given in all cases.

No explosives or combustible cargo, such as petroleum, nitroglycerin, acids, etc., will be transported by this line. Launches, boats, etc., taken at special rates upon application.

Parcel tariff, San Francisco to Central American and Mexican ports.

Package of 1 pound or less.....	\$1.50
Package over 1 pound to 2 pounds.....	1.50
Package over 2 pounds to 3 pounds.....	1.50
Package over 3 pounds to 4 pounds.....	1.50
Package over 4 pounds to 5 pounds.....	1.50
Package over 5 pounds to 7 pounds.....	1.50
Package over 7 pounds to 10 pounds.....	1.50
Package over 10 pounds to 15 pounds.....	2.00
Package over 15 pounds to 20 pounds.....	2.00
Package over 20 pounds to 25 pounds.....	3.00
Package over 25 pounds to 30 pounds.....	3.00
Package over 30 pounds to 35 pounds.....	4.00
Package over 35 pounds to 40 pounds.....	4.00
Package over 40 pounds to 45 pounds.....	5.00
Package over 45 pounds to 50 pounds.....	5.00
Package exceeding 50 pounds, per pound.....	.10

REPORT OF JOSEPH L. BRISTOW.

185

ADDITIONAL CHARGE FOR VALUE.

From \$51 to \$75.....	\$1.00
From \$75 to \$100.....	2.00
From \$101 to \$200.....	3.00
From \$201 to \$300.....	4.00
From \$301 to \$400.....	5.00
From \$401 to \$500.....	6.00
From \$501 to \$600.....	7.00
From \$601 to \$700.....	8.00
From \$701 to \$800.....	9.00
From \$801 to \$900.....	10.00
From \$901 to \$1,000.....	10.00
Over \$1,000.....	1 per cent.

ALEXANDER CENTER,
General Agent, San Francisco.

SAN FRANCISCO, November 1, 1902.

EXHIBIT B 42.

Question. What are the principal articles of freight transported from New York to the Pacific ports of the United States?

Answer.	Lard.
Cotton-seed oil.	Mechanics' tools.
Carpet lining.	Oilcloth and linoleum.
Cotton waste.	Paper of all descriptions.
Canned goods.	Paint.
Collars and cuffs.	Stationery of all descriptions.
Candy.	Soap.
Drugs.	Stamped ware.
Earthenware.	Tinware.
Electrical goods of all descriptions.	Talking machines.
Glassware.	Toys.
Granite.	Wall finish.
Hardware.	Wire, barbed and plain.
Iron and steel of all descriptions.	
Lubricating oil.	

R. L. WALKER, Traffic Manager.

FEBRUARY 4, 1905

EXHIBIT B 43.

Question. What are the principal articles of freight transported from New York to the Mexican, Central, and South American ports on the Pacific coast?

Answer.	Lubricating oil.
Boots and shoes.	Lard.
Barbed wire.	Lamps.
Cartridges.	Mechanics' tools.
Cigars and cigarettes.	Machinery.
Common jewelry.	Manufactured iron.
Canned goods.	Provisions.
Drugs.	Revolvers.
Dry goods.	Railroad material.
Electrical material.	Sewing machines.
Flour.	Soap.
Glassware.	Typewriting machines.
Hardware.	
Kerosene oil.	

R. L. WALKER, Traffic Manager.

FEBRUARY 4, 1905.

EXHIBIT B 44.

Question. What are the principal articles of freight transported from Europe to the Pacific ports of the United States?

Answer.

Books.
Canned (canned vegetables).
Cottons (bleached).
Cottons (unbleached).
Cement.
Furniture.
Jute burlap.
Jute cloth.

Jute bags.
Olives.
Potash.
Sardines.
Steel.
Wine.
Whisky.

FEBRUARY 4, 1905.

R. L. WALKER, *Traffic Manager.*

EXHIBIT B 45.

Question. What are the principal articles of freight transported from Europe to the Pacific ports of Mexico, Central America, and South America?

Answer.

Acids.
Beer and wine.
Blankets.
Bar iron and steel.
Chemicals.
Cottons.
Caustic soda.
Cyanide potash.
Cement.
Conserves (vegetable).
Drugs.
Earthenware and crockery.
Essences.
Furniture.
Galvanized iron sheets.
Glassware.
Ginger ale.
Hosiery.
Hardware.
Jute bags.
Jute cloth.

Linens.
Machinery.
Mineral water.
Matches (safety).
Medicines.
Millinery.
Oil (olive).
Provisions.
Paper and stationery.
Perfumery.
Paints.
Rope.
Sacks (coffee).
Straw hats.
Soap.
Saddlery.
Thread.
Umbrellas (silk and cotton).
Whisky and gin.
Woolens.
Yarns.

FEBRUARY 4, 1905.

R. L. WALKER, *Traffic Manager.*

EXHIBIT B 46a.

Question. What are the principal articles of freight transported from the Pacific ports of the United States to New York?

Answer.

Asphaltum.
Beans.
Canned goods.
Hides.

Lead.
Rags.
Wine.
Wool.

FEBRUARY 4, 1905.

R. L. WALKER, *Traffic Manager.*

EXHIBIT B 46b.

Question. What are the principal articles of freight transported from the Pacific ports of the United States to Europe?

Answer.

Canned salmon.
Dried fruit.
Dried peaches.

Dried prunes.
Seashells.

R. L. WALKER, *Traffic Manager.*

FEBRUARY 4, 1905.

EXHIBIT B 47a.

Question. What are the principal articles of freight transported from the Pacific ports of Mexico, Central and South America to New York?

Answer.

Coffee.
Cotton.
Cocoa.
Coca leaves.
Goatskins.
Hides.
Ivory nuts.
Iodine.
Lumber.

Ores.
Panama hats.
Rubber.
Shells.
Sugar.
Sheepskins.
Treasure.
Wool.
Bananas.

R. L. WALKER, *Traffic Manager.*

FEBRUARY 4, 1905.

EXHIBIT B 47b.

Question. What are the principal articles of freight transported from the Pacific ports of Mexico, Central and South America to Europe?

Answer.

Balsam.
Bark.
Coffee.
Cotton.
Coca leaves.
Cocoa.
Deerskins.
Dyewoods.
Goatskins.

Hides.
Ivory nuts.
Iodine.
Indigo.
Lumber (cedar, mahogany).
Plants.
Rubber.
Shells.
Sugar.

R. L. WALKER, *Traffic Manager.*

FEBRUARY 4, 1905.

EXHIBIT B 48.

Statement showing additions to property or capital expenditures paid for out of net earnings.

1895. Steamers <i>Alliance</i> , <i>Finanza</i> , and <i>Advance</i>	\$336,655.50
1896. Two steel lighters.....	24,383.35
1896. Land at Bohio.....	2,500.00
1896-7. Water tank and pipes to connect Monkey Hill reservoir.....	3,464.81
1897. Installation of electric plants, providing new staterooms, and other additions on steamers mentioned above.....	33,513.77
1898. New floating pile driver.....	7,428.03
1901. Electric-light plant, Colon.....	10,055.19
1901. Ice-making plant, Colon.....	6,792.70
1901. Dredging attachment for floating pile driver.....	1,083.34

1901-2. New tracks, Colon yard.....	\$12,462.48
1901-2. Improvements to pier No. 2, Colon.....	12,313.53
1901-2. Three new coal lighters.....	36,342.40
1897-1902. {New terminal at La Boca.....	\$2,220,357.13
{Less provided by disposal of bonds.....	1,087,000.00
	1,133,357.13
1902. Filling lagoon north of pier 1, Colon.....	4,100.73
1902. Tank at Pedro Miguel.....	3,141.48
1904. Two new lighters, to November 30.....	9,901.76
1904. Duplicate ice plant, to November 30.....	3,452.12
1904. New "Y" at La Boca Junction, to November 30.....	2,524.27
1904. Installation of electric motor on steam cranes, to November 30.....	1,747.91
	1,645,230.50

NEW YORK, February 6, 1905.

EXHIBIT B 49.

Question. Under the traffic contract with the Pacific Mail Steamship Company, who fixes the special rates to be charged from New York to San Francisco and from San Francisco to New York?

Answer. The Pacific Mail Steamship Company, as the initial carrier, fixes any special rates from San Francisco to New York. The Panama Railroad Company, as the initial carrier, fixes the special rates to be charged from New York to San Francisco. Each initial carrier is limited so that no rate can be less than 40 cents per 100 pounds without consultation with the other.

R. L. WALKER, *Traffic Manager.*

FEBRUARY 6, 1905.

EXHIBIT C.

List of questions submitted to Hon. John F. Wallace, chief engineer Isthmian Canal Commission, and his answers thereto.

COLON,
Isthmus of Panama, February 18, 1905.

What are the principal articles to be used in the construction of the canal that will have to be shipped to the Isthmus?

Give as accurate an estimate as possible of the amount of each of these articles that will be necessary.

What are the possible sources of supply of these articles—that is, from where may they be secured? At what period in the construction of the canal will they be needed?

Can you estimate what rolling stock will be required by the Panama Railroad to handle the business of the Canal Commission and when such rolling stock will be needed?

Does the Commission contemplate the construction of any wharves for its own use?

In your judgment, will it be necessary for the railroad company, in order to handle the business of the Canal Commission properly, to increase its present wharfage facilities?

From your knowledge of the machine and car shops of the railroad, what increase will be required in order that the business of the Canal Commission may be promptly attended to?

Is the Commission experiencing any embarrassments now on account of lack of facilities on the part of the railroad? If so, state in detail what such embarrassments are.

Has the Commission suffered any embarrassments from mismanagement or neglect on the part of the management of the railroad? If so, state specifically what such embarrassments were.

Are there any improvements that should be made in the railroad, not covered by the above questions, to enable it to properly handle the work of the Canal Commission and at the same time properly care for its commercial business?

(Signed) J. L. BRISTOW,
Special Panama Railroad Commissioner.

To Hon. JOHN F. WALLACE,
Chief Engineer Isthmian Canal Commission.

ISTHMIAN CANAL COMMISSION,
Panama, March 15, 1906.

Hon. J. L. BRISTOW,
War Department, Washington, D. C.

MY DEAR SIR: I have the honor to submit to you herewith the answers to the various written and verbal questions which you propounded to me during your visit to the Isthmus, and which I understand the letter addressed to me by the Secretary of War authorized you to ask and required me to answer.

Yours, respectfully,

JOHN F. WALLACE, *Chief Engineer.*

1. Question. What are the principal articles to be used in the construction of the canal that will have to be shipped to the Isthmus?

Answer. Coal, cement, brick, sewer pipe, water pipe, lumber of all classes, building material of all classes, steam shovels, engines, cars, drills, wood-working machinery, shop machinery of all classes, tools of all classes, sundry supplies, provisions for the inhabitants, steel rails, railroad ties, broken stone for ballast, concrete, and paving purposes; hose, rope, dynamite, stone from Culebra cut for Colon breakwater.

It will be impossible to mention all of the articles necessary for use.

2. Question. Give as accurate an estimate as possible of each of these articles that will be required.

Answer. It is impossible at this time to give an accurate estimate of the articles mentioned in question 1 which will be needed, but during the ten years of canal construction it is estimated that it will amount to a total of 20,000,000 tons, including the redistribution of that portion of the material and supplies which will have to pass over the Panama Railroad.

In addition to this, it is estimated that the through commercial business will amount to at least 4,000,000 tons during the same period. While this is in excess of what has been handled, the tonnage will increase with any decline of rates or removal of present restrictions imposed by the Panama Railroad and Steamship Line.

This will give a total of 24,000,000 tons in ten years—an average of 2,400,000 tons per annum, or, counting three hundred days of freight movement, a rough average of 8,000 tons per day, of which it is estimated that about 5,000 tons will move south and 3,000 tons north.

The amount of southbound tonnage will, of course, regulate the number of trains which it will be necessary to operate. The average freight-train tonnage on the Panama Railroad has been approximately 171 tons, and if no change is made in the character of equipment or the efficiency of the management of the road it will require an average of 30 freight trains a day in one direction to handle this business. This is practically about five times the present freight traffic of the road.

Bear in mind, however, that this business does not include the use of the tracks or facilities of the Panama Railroad for construction trains in handling excavated material from from Culebra cut to spoil banks, which will, of course, add an additional servitude to the property.

Attention is also called to the fact that the daily average will at certain times be more than doubled, as the business will congest near the period of vessel arrivals, and it will be impracticable to prevent the bunching of material shipments.

It will be self-evident to any one familiar with railroad business, that this traffic can not be handled through the agency of the Panama Railroad as it exists to-day with its present equipment.

3. Question. What are the possible sources of supply of these articles; that is, from where may they be secured? At what period in the construction of the canal will they be needed?

Answer. It is impracticable to answer this question beyond stating that it is presumed that these supplies will come from the United States, and it may also be presumed that commercial conditions are such that fully 90 per cent of the material and supplies received for the canal will come from east of the Rocky Mountains.

The locality from which this material can be furnished will be controlled by the competitive bids of manufacturers and dealers, and the competition which may be created for the business by the rail and ocean carriers. The impossibility of making any accurate prediction as to this source of supply is, therefore, apparent.

It is estimated that about 8,000,000 tons of the 24,000,000 tons mentioned under question 2 will originate on the Isthmus in the redistribution of material locally, in the hauling of broken stone for concrete and paving purposes, and in hauling stone from Culebra to Colon or Panama for harbor purposes.

The time during which it will be necessary to remove this material will depend on the necessities of the work, the promptness with which requisitions are filled, material manufactured and delivered on the Isthmus, and the ability to secure and perfect the necessary

organization to carry on the work. The requirements will rapidly increase, culminating in four or five years, and from that time forward will gradually diminish until the completion of the work.

4. Question. Can you estimate what rolling stock will be required by the Panama Railroad to handle the business of the Canal Commission, and when such rolling stock will be needed?

Answer. 24 ten-wheel locomotives, weighing from 70 to 80 tons; cylinders, 19 by 26 inches; 500 box cars of 30 or 40 tons capacity, preferably 40 tons (with option to increase this number to 1,000); cars to be American standard, dimensions as follows: 36 feet long, 8 feet 6 inches wide, 8 feet high inside, clear, provided with modern air-brake and automatic coupler equipment; 500 standard flat cars of 40 to 50 tons capacity; 6 first-class passenger coaches, suitable for use in a warm climate, with cane reversible seats; capable of seating 60 to 75 passengers; 12 standard caboose cars, with cupolas; 206-ton wrecking cranes.

The above needed at once. It may be necessary to largely increase this amount later on.

5. Question. Does the Commission contemplate the construction of any wharves for its own use?

Answer. Yes.

6. Question. In your judgment, will it be necessary for the railroad company, in order to handle the business of the Canal Commission properly, to increase its present wharfage facilities?

Answer. Yes.

7. Question. From your knowledge of the machine and car shops of the railroad what increase will be required in order that the business of the Canal Commission may be properly attended to?

Answer. At the present time the machine and car shops of the Panama Railroad are not adequate to properly care for the ordinary business of the road. They are poorly planned and the work is crowded and congested. There is no possibility of expansion at the present locality.

It is recommended that the general repairs of locomotives be taken care of at the shops of the Isthmian Canal Commission at Bas Matachin, and that new shops be provided for the maintenance and repairs of the car equipment of the Panama Railroad at Cristobal-Colon, in connection with the machine shops already established by the Isthmian Canal Commission at that point. Plans for their enlargement are now under consideration.

It is also recommended that the daily repairs to the engines engaged in the transportation service of the Panama Railroad be made at that point—the general repairs to be made at the Bas Matachin shops, as mentioned above.

8. Question. Is the Commission experiencing any embarrassments now on account of lack of facilities on the part of the railroad? If so, state in detail what such embarrassments are.

Answer. The canal work under the control of the Isthmian Canal Commission has been embarrassed from the start by the lack of railroad facilities. While this was slight at first, it is increasing from day to day, and is due to the lack of proper equipment to take care of the business. It is impossible to state in detail what these embarrassments are.

In substance, the present situation is due to inability to provide cars and promptly move the canal material, due to shortage of engine and car equipment.

Attention can not be too strongly called to the condition of congestion and delay into which the affairs of the Panama Railroad Company are rapidly drifting, due to the inadequacy of its present rolling stock and equipment.

The canal work is being delayed; warehouses and docks are full of material, and traffic across the Isthmus, which is continually increasing during this period of the year, is becoming rapidly congested.

When it is considered that practically no addition has been made to this equipment for years, and that the hauling capacity of the engines and the carrying capacity of the cars are only one-third to one-half the capacity of modern equipment, the necessity for the immediate provision of additional equipment without the loss of a single day is apparent.

9. Question. Has the Commission suffered any embarrassments from mismanagement or neglect on the part of the management of the railroad? If so, state specifically what such embarrassments were.

Answer. The answer to question 8 will also answer this question, except I would say that the men in local charge of the road have apparently used every possible effort to accommodate the business of the Canal Commission, but have been restricted by lack of facilities.

To what extent the situation will be improved under the management of Mr. Prescott, acting superintendent I can not say. It will take time to determine whether or not he is broad enough, and has the ability to grasp the situation and give results that will be satisfactory.

I desire to state, however, that it will be impossible for any railroad organization to satisfactorily perform its functions until the proper facilities are provided for it, adequate to the increased demands which have been and will be made upon the property.

10. Question. Are there any improvements that should be made in the railroad not covered by the above questions to enable it to properly handle the work of the Canal Commission, and at the same time properly care for its commercial business?

Answer. Yes. (1) The larger portion of the Panama Railroad should be double-tracked at once; (2) on such portions as it is not considered advisable to double track, passing tracks should be provided and new yards constructed; (3) entire new equipment should be furnished; (4) the wharf and docks at La Boca should have at least three times their present capacity; (5) additional dock facilities should be provided by the Isthmian Canal Commission at Cristobal-Colon; (6) the old Pacific Mail wharf should be rebuilt and placed in service at Colon; (7) the shop improvements previously mentioned, should be carried out; (8) all of the light rail now on the Panama Railroad track should be renewed with heavier rail; (9) bridges should be strengthened in order to provide for the increased weight of engine and rolling stock; (10) those parts of the road now ballasted with gravel should be ballasted with broken stone.

Other improvements will probably suggest themselves as the business of the road develops.

Whoever is to be held responsible for the operation and maintenance of the railroad property should be immediately authorized to arrange for all of the improvements noted above, and make such others as a close investigation of the necessities of the road may determine.

To-day the road, with its equipment, is utterly inadequate to handle the business offered.

The situation will rapidly become worse until such time as the improvements mentioned above can be made.

With the most energetic work, it will require at least a year to provide equipment and make such improvements on the road as are now needed for efficient and economical operation.

The first and most urgent need is new equipment—engines and cars—which should be provided immediately.

ADDENDA.

In addition to replying to your formal questions, you asked to be fully informed on any matters connected with the road.

It is also necessary to take care of the through and local passenger service, which at the present time consists of three trains each way per day. This will have to be supplemented, however, with additional service in order to give more facilities for the officers and employees connected with the canal work to get over the line.

It should be borne in mind that the business heretofore mentioned will, after all, be only a small part of the use which it will be necessary to make of the Panama Railroad, in the removal of the material excavated from Culebra cut on the sea-level plan. It will be necessary to use the existing line of the Panama Railroad as an initial transportation base to reach distant spoil banks. This, of course, can be done by first widening and double tracking the Panama Railroad on each side of Culebra cut to the sea.

It will be necessary to use and rely upon the facilities of the Panama Railroad to the fullest and most complete extent. With the large amount of tonnage which will pass over the line, other than commercial business, it is anticipated that the volume of business of the Panama Railroad for the purpose of canal construction will be at least twenty times as great as the present commercial business.

From the standpoint of a practical railroad man the management, traffic, and operating problems connected with the Panama Railroad are simple, and the complications suggested by certain interests have no tangible existence.

Under the former "régime" when the principal motive was the payment of dividends upon an excessive capitalization the situation was different.

It is presumed the United States Government intends that this road shall be used in the interest of the construction of the canal to its fullest capacity, and the complications and additional expense to the Government, due to the increased cost of the canal or delay in its construction, which will be the result of any separation between the management of the railroad and the construction of the canal, would be many-fold greater than any advantages which could be gained from the operation of the railroad and steamship line as a money-making proposition.

However, the fact should not be lost sight of that with the purchase of the road the duty of continuing to maintain and operate a traffic line across the Isthmus devolves upon the United States Government. This is a matter easy to take care of, and, while not neglected, should be a purely incidental feature.

The traffic regulations governing the handling of commercial business should be moderate and reasonable, so as to offer the minimum restrictions to the natural flow of commerce; and there is no valid reason why the traffic of the railroad should not be conducted on practically the same principle as traffic will hereafter be conducted through the canal upon its completion; that is, this avenue should be open to the unobstructed flow of the commerce of the world with as few restrictions as possible.

Any argument which may be raised against the lowering of rates and the unobstructed use of the Panama Railroad by commerce would certainly apply with equal, if not still greater, force to the construction of the canal itself.

As the tax on the tonnage which will pass through the canal will probably not exceed \$1 or \$2 per ton, it is difficult to see how a moderate charge for transportation of freight over the Isthmus can in any way materially interfere with the best interests of the United States Government. If it does, and a high rate is necessary, the natural question would be, Why construct the Panama Canal?

The data contained in the annual reports of the Panama Railroad are unsatisfactory. From an analysis of these reports it is difficult to make an exact determination of what has been the actual cost of transportation of freight across the Isthmus. Judging, however, by such information as can be obtained from these reports, it would seem to approximate roughly \$1.30 per ton, not including the expenses of the New York office or the fixed charges, interest, or dividends, but including all of the cash outlay on the Isthmus for the maintenance and operation of the property.

Considering all the questions that affect and relate to the cost of transportation, including the various equities which would be directly and indirectly considered, it is thought that a charge of \$2.50 per ton from ship's side to ship's side on all through business would be ample and sufficient.

In making a rate of this character it should be done without regard to classification, except that for the lighter articles 40 cubic feet should be considered a ton; that is, all articles which occupy space to exceed 40 cubic feet should be charged for on the basis of 50 pounds per cubic foot.

This rate is subdivided approximately into 25 cents per ton for terminal charges at Colon, 25 cents for terminal charges at Panama, and \$2 for transit across the Isthmus, and applies to carload lots.

As to intermediate and local charges, 20 cents per 100 pounds, or 2 cubic feet, regardless of classification, should be ample for less than "carloads," with a minimum charge of 50 cents per package. This rate, however, should prevail regardless of distance, as the length of line is so short in proportion to the expense of handling at terminal points that no deduction should be made on account of short haul.

In addition to these rates, storage facilities should be provided at Panama and Colon for the storage of transcontinental freight, and a charge of 5 or 10 cents per ton per day of twenty-four hours should be made for the storage of freight held over a certain number of days of free time, which should be such reasonable time as would naturally be allowed for the ship connections on each side of the Isthmus.

This storage charge would in a measure operate in favor of the regular lines as against the tramp steamers, and if it was desired to encourage lines as against irregular vessels this storage charge could be so regulated and adjusted as to do so, as the expense of long-continued storage should not rest upon the Panama Railroad or the United States Government without due compensation.

If rates were established as above recommended, they would be in a way in the nature of transfer charges, and would be what are called in traffic terms "arbitraries." These arbitraries could be published throughout the commercial world, and would enable through bills to be made subject to these charges from any port to any port the lines connecting which might desire to use the route across the Isthmus of Panama.

These charges could be collected in cash from either the steamship company delivering freight to the Panama Railroad, or receiving freight therefrom, the source of collection depending upon whether the freight was prepaid at the point of shipment or was to be collected at the point of destination. In the former case the company making the delivery to the Panama Railroad would pay the charges; in the latter case the company receiving the freight from the Panama Railroad would do so; and these charges would follow the waybill through to and be collected at the final destination by the carrier making ultimate delivery to the consignee.

It would not be necessary to keep any accounts or have any complicated traffic arrangements with any connecting carrier. Claims for loss and damage to goods which could be actually located on the Panama Railroad Company could, of course, be adjusted by the local manager of the railroad, the same as any of the other operating expenses connected with the management and operation of the road. The hidden losses and uncertain claims the Panama Railroad could absolutely decline to participate in and so announce to the commercial world, the result being that the connecting shipping lines would take care of and absorb this feature of expense.

These collections could be made either by the Panama Railroad officials or, if the road is purchased by the United States Government, by a representative of the Treasury Department, and could be placed to the credit of a fund for the operation of the Panama Railroad, if it is desirable to keep such a fund separate from the general canal construction account.

Should any deficit arise between the cost of maintaining and operating the Panama

Railroad and the provision for its fixed charges, such deficit could and should be made up by the Isthmian Canal Commission, and charged to the freight account for the construction of the canal.

This method would mean that the Isthmian Canal Commission would be furnished with its transportation facilities on the Isthmus at actual cost, and would be much simpler and less complicated than placing a fictitious charge on the cost of transportation of articles for the Commission, or making charges by the Panama Railroad Company against the Commission for various accommodations and facilities furnished by the railroad company. It would be much more simple and direct than it would be to make such charges as would show a profit in the maintenance and operation of the railroad, which profit would ultimately be credited to the Isthmian Canal Commission or absorbed into the United States Treasury. It should be borne in mind that in all questions of railroad operation and management, as well as in all questions surrounding the construction of the canal, simplicity and directness are desirable.

The question of the Panama Railroad has heretofore been discussed in these notes without any regard to the steamship line. Whatever reasons there might previously have been for a consolidation and common management of the steamship company and the railroad company, now that the United States Government has possessed itself of both properties and it is no longer necessary to make commercial returns with a view to the payment of dividends on stock, the necessity of a combination between the two has ceased to exist.

The steamship proposition should therefore be considered entirely on its own merits, and the question as to whether or not the steamship line should cease to be operated by the United States Government should be considered entirely separate from any question connected with the management of the Panama Railroad.

While the reports of the Panama Railroad Company are drafted in such a way as not to clearly show the relative earning capacity of the steamship line and the railroad company, it is evident from an examination thereof that if the accounts of the Panama Railroad Steamship Company had been entirely and properly separated from those of the railroad, the results of operation would show a loss and not a gain.

Any well-ordered steamship line would set apart a certain portion of its earnings annually to guard against disasters of the sea and the ordinary depreciation of property, also to provide a fund not only for the proper maintenance but for the rebuilding and eventual replacing of its ships, and a still further fund for the adoption of improvements which the increased demands of the public are continually requiring from all transportation lines, both on land and sea. That this has not been done in the management of the Panama Railroad Steamship Line goes without saying. The boats have not been properly maintained out of the earnings of the company. They are antiquated and were inadequate for the ordinary business of the company before they came under the control of the United States Government, and they are still less adequate for the heavy demand on ocean transportation which is now at hand.

There seems to be no reason why it would not be to the interest of the Government to dispose of these ships, provided it could be done in such a way as to insure that future ocean rates would not be excessive, and to insure the replacement of the present ships by those of sufficient speed and tonnage to furnish proper facilities for the transportation of men and supplies needed in the construction of the canal.

However, if broader questions of policy render it necessary for the United States to continue the operation of this line, additional ships of greater speed and larger tonnage should be immediately provided, and arrangements should also be made with a view to providing adequate transportation facilities to other United States ports as well as to New York.

In the event that it is decided to maintain and continue the operation of the Panama Railroad steamships, the questions of the steamship line and its management should be absolutely and distinctly separated from the management and operation of the Panama Railroad, and no amount should be taken from the earnings of the Panama Railroad to be applied to the management and operation of the steamship line. Each should stand absolutely on its own bottom.

In fairness to private interests, and to encourage the establishment of other steamship lines, all lines delivering freight to the Panama Railroad at Colon from the United States should be placed on an absolute equality. The payment of any portion of the expenses of operation and maintenance of the steamship line out of the receipts of the Panama Railroad, is in effect a subsidy to the Panama Railroad Steamship Line and is a discrimination against other lines of steamers carrying freight to Colon.

In other words, take any line which might be established between New York and Colon by private interests, in addition to the Panama Railroad Steamship Line, carrying through freight for San Francisco or other points. The giving to the Panama Railroad Steamship Line, in the way of a proportionate payment of expenses, any part of the revenue derived from carrying freight across the Isthmus, would be practically in the nature of a subsidy.

Again, the payment of any part of the expenses of the steamship line from that proportion of the through rate which would be collected by the Panama Railroad Company on through business from New York, would be in the nature of a rebate, which would of course be contrary to public policy.

These remarks are based on the establishment of an arbitrary rate for the transportation of freight across the Isthmus, regardless of the steamship line from which it may be received or to which it may be delivered.

It will probably be said that the practice of through billing from New York to San Francisco or other points by way of the Panama Railroad and the steamship lines combined will necessarily have to be continued, and that a certain proportion of this through rate should be divided between the railroad and the steamship companies. This latter course is not essential and is not desirable. The arbitraries fixed for the transportation of freight across the Isthmus should be confined entirely to the railroad. The rate which the Panama Railroad Steamship Line may charge on transportation from New York to Colon should be fixed either on the basis of a fair return for the service, considering the expense of maintaining and operating the line, or as the result of competition for that business between the steamship lines operating between United States ports and Colon. And if it is found that as the result of this policy of operation the steamship line can not be operated at a profit, it should either be taken off or the loss should be pocketed on the theory that it is better to stand this loss and encourage competition than to eliminate the line and permit a combination of established interests to be formed, which would eventually raise the rate and make it in the end more expensive. In other words, the loss should be considered as an insurance against the possibility of exorbitant rates. If it is not justifiable upon this ground, then the operation of the Panama steamships by the United States Government would not be warranted.

But under no circumstances is there any justice or equity in the handling of the business in such a way as to directly or indirectly result in practically subsidizing the Panama Railroad Steamship Line between New York and Colon; and there is no reason why the management of these two properties can not and should not be entirely separate and be conducted independent of each other.

If the railroad company is handled on the basis outlined above, it would eliminate approximately \$100,000 a year in expenses connected with the New York office for advertising and management, and in addition about \$100,000 a year in other New York expenses. In other words, as I understand the situation, the New York office costs in round numbers approximately \$200,000 a year, which amount, however, is distributed between the Panama Railroad and the Panama Railroad Steamship Line. There is no reason why there should be any advertising, office, or traffic expense, as far as the Panama Railroad Company is concerned, in the United States, other than the merely nominal expense of keeping the general accounts of the Panama Railroad organization.

A general manager situated in New York operating the steamship line, and a general manager operating the Panama Railroad on the Isthmus, each reporting to whoever the United States Government might designate as president of the Panama Railroad and steamship company, would give the most efficient results as far as the construction of the canal is concerned, as it is not considered that either the steamship company or the railroad should be operated as a commercial enterprise for profit by the United States, the implied obligation to the public being to keep up and provide existing transportation facilities. Outside of that the sole purpose should be to secure the most efficient management and operation of the property for the economical and expeditious construction of the Panama Canal.

The organization of the property outlined above will be simple and effective and will undoubtedly accomplish these results. It should also place the Administration in an impregnable position as against criticism or favoritism.

Respectfully submitted.

JOHN F. WALLACE, *Chief Engineer.*

ISTHMIAN CANAL COMMISSION,
Panama, March 20, 1905.

Hon. J. L. BRISTOW,
Washington, D. C.

SIR: In continuation of my letter to you of March 15, in reference to Panama Railroad matters, I send you herewith the following:

Exhibit A.—This is a statement which has been compiled by one of my assistants, showing some unit costs of the business of the Panama Railroad.

As quite a number of the items contain no data showing a separation between expenses due to passenger business and those due to freight business, an arbitrary division has been

made of 80 per cent freight and 20 per cent passenger. You will note, however, that if the proportions are changed in any way it will only affect the relative unit cost.

This statement shows that the cost of handling freight per ton over the railroad line, as applied to all the expenses on the Isthmus, amounts to \$1.286 per ton, or approximately 2.6 cents per ton mile.

Considering the average general expenses of the New York office and applying them to the railroad, but not making any division between the agency and other expenses of the New York office, which were slightly in excess of this amount, you will note that this would increase the cost per ton over the railroad line to \$1.503, or 3 cents per ton per mile.

Treating the passenger business in the same way, you will note that the expense per passenger on the Isthmus, counting the expenses on the Isthmus alone, is \$1.442. Charging the proportion of the New York expenses, 24.3 cents, would make the total cost per passenger \$1.685, or 3.37 cents per mile. Please note, however, that the expense on the Isthmus alone is slightly under 3 cents per mile.

This sheet does not show any fixed charges.

It should be borne in mind, however, that any increase in business will not carry with it a corresponding increase in relative expense; or, in other words, that any increase in freight business should decrease the rate per ton and the rate per ton per mile for freight transported, and any increase in passenger business should decrease the rate per passenger and the rate per passenger mile.

This high cost per ton per mile of transporting freight across the Isthmus is due to a variety of causes.

First and primarily, to the light power and equipment, the tonnage of freight trains averaging only about one-third of what it should, considering the gradients of the railroad. The cost of transporting freight should increase or diminish very nearly with the decrease or increase of the train tonnage.

At present double-headers are being run on freight trains that do not handle even the full tonnage that a single engine should easily haul.

While the annual reports do not show the tons per train, investigations I have been able to personally make on the Isthmus show that the number of tons per train is remarkably low.

In addition to light power, the nominal car capacity of the majority of the freight car equipment is only 12 tons.

Again, I find that in sorting out the freight on the receiving docks such a detailed separation is made of this freight as to largely increase the number of lightly loaded cars, many of the cars passing over the Isthmus containing much less than even the nominal rated capacity of the car.

This latter trouble was evidently primarily due to the shortage of warehouse and dock room, particularly at La Boca, and has been aggravated by custom.

These, with other causes which are too trivial to mention in a report of this character, have resulted in an extraordinarily low average train tonnage and an exceedingly high rate per ton per mile.

Exhibit B.—This statement shows in a condensed form the principal freight rates of the Panama Steamship Company between New York and Colon, the railroad rates between Colon and Panama, the Pacific Mail Steamship Company's rates between San Francisco and Panama, and the Royal Mail Steamship Company's rates between Liverpool and Colon.

Exhibit C.—This exhibit shows the through rates between various points via the Panama Railroad across the Isthmus, and shows the division between the steamship lines on the Pacific, the Panama Railroad, and the steamship lines on the Atlantic.

I desire to particularly call attention to the extraordinarily wide variation in the tonnage rates on various classes of freight across the Isthmus according to its point of origin or destination.

You will note that the Panama Railroad's proportion of the through rate between San Francisco and New York is less than \$2 per ton, whereas its proportion of the rate between points on the west coast of Mexico and New York is \$8, practically four times as high as the through rate to San Francisco.

You will also note that the Panama Railroad's proportion of the through rate on business between west Mexican ports and Europe is less than its proportion of the through rate on business between those ports and New York.

I particularly desire to call attention to the fact that the rate charged by the Panama Railroad Steamship Company for business of the Isthmus Canal Commission transported over the railroad and over the steamship line is in excess of the rate on through business between New York and San Francisco; and I desire to remonstrate against the work under my charge being increased in cost due to paying the Panama Railroad Steamship Line \$5 per ton on freight from New York to Colon when it only receives \$3.57½ per ton on other freight from New York to Colon destined to San Francisco.

Why the United States Government, through the Isthmian Canal Commission, should pay a higher rate of freight for the transportation of the large amount of goods needed for the Panama Canal, in order to enable the steamship company to handle material at a much lower rate for private parties destined to points beyond Panama, I fail to see; and I would be grossly negligent in my duty if I permitted this situation to continue without a vigorous remonstrance.

In this connection I desire to state that I have been informed by the chief of the material and supplies department that the same rate is charged on the United Fruit Company's steamers from New Orleans to Colon, and that this rate was arranged for through the officials of the Panama Railroad Company in New York.

Why the Panama Railroad Company in New York should regulate the rates paid by the Isthmian Canal Commission to the United Fruit Company on business from New Orleans I fail to see, as it would evidently be to the interest of the officials of the Panama Steamship Company to insist on the maintenance of high rates from New Orleans by the fruit company's steamers; that is, if they were managing the steamship company as a commercial enterprise.

That the traffic officials of the Panama Railroad Steamship Company have the power to regulate the rates charged by the United Fruit Company's steamers from New Orleans to Colon is apparent by an examination and analysis of the freight schedule.

On all freight billed from New York to San Francisco the Panama Railroad Steamship Line receives \$3.57½; the Panama Railroad Company receives for the same freight \$1.92½, or a total of \$5.50 per ton from New York to Panama.

The rates charged by the Panama Railroad Company between Colon and Panama vary from \$15 per ton on first-class goods to \$5 per ton on fifth-class goods. I have not in my possession at this time a full description of these classifications, or the proportionate amount of freight carried in each; but you will note that if the Panama Railroad Steamship Line denied to the United Fruit Company the right of through billing and did not make a reduction in the ordinary rates on the railroads across the Isthmus, but charged the full rates on all goods handled by the United Fruit Company's steamers between New Orleans and Colon, that freight of the fifth-class would only net the United Fruit Company 50 cents per ton for carriage between New Orleans and Colon, and that all other classes of freight would have to be carried at a loss, as the local rates between Colon and Panama on the other classes exceed the proportion to Panama of the through rate between New York and San Francisco, which, as I have shown above, only amounts to \$5.50 per ton.

The above also explains the reason why no steamship line can exist between United States ports and Colon in opposition to the Panama Railroad Steamship Company.

Whatever justification there may have been for the maintenance of these schedules in the past, when the officials of the Panama Railroad considered it necessary to establish a steamship line between New York and Colon in order to feed the business of the railroad across the Isthmus, it is not apparent why the United States, which owns sixty-nine seventieths of the Panama Railroad Steamship Line, should be a party to the continuance of such practice.

The only justification which the United States Government can have for the ownership, control, and operation of the Panama Railroad and Steamship Line is primarily to assist in the construction of the Panama Canal, and to enable the railroad to be used to facilitate the speedy, efficient, and economical construction of the canal; also incidentally to afford the public a line of traffic communication across the Isthmus of Panama.

The policy, however, should be a broad and liberal one and should not be based on squeezing the last possible cent out of each particular shipment of goods, depending upon origin or destination or the individuality of the consignor or consignee. The requirements are that the service should be prompt and efficient and that the rates should be fair and reasonable without discrimination.

There seems to be no reason why the practice which the United States Government has been endeavoring to apply to railroad operations in the United States of America should not apply to the operation of the Panama Railroad; and it would certainly be a confession of weakness if the Government should confess that it was not able to apply to a railroad controlled absolutely by it and only 47 miles in length the fundamental principles of good management and adjustment of tariffs which it has been endeavoring to apply to the vast railroad systems on the American continent, which so interlace each other that the traffic complications are as much greater than those that exist in connection with the Panama Railroad as the multitude of stars in the Milky Way is greater than a single star in the heavens.

A common sense and simple solution of this whole matter connected with the Panama Railroad Steamship Line would be—

(1) To establish a fair and reasonable rate for the transportation of all freight across the Isthmus, which should be not less than \$2 nor more than \$2.50 per ton. It is entirely unnecessary to have any complicated classification, and the only one which should exist is that

light articles where 40 cubic feet or less than a net ton of 2,000 pounds, should be charged for at the equivalent rate of a cubic foot equaling 50 pounds.

(2) The function of the Panama Railroad should be that of a transfer company transporting freight across the Isthmus of Panama and serving all comers alike.

(3) The rates and business of the steamship line should be entirely separated from those of the railroad company, and should be under the control of a separate manager stationed in New York. There should be a complete separation between the management and accounts, receipts, and disbursements of the steamship company and the railroad company. These accounts could be afterwards consolidated in the annual reports of the company.

(4) The rates of freight charged on the steamship line between New York and Colon should be reasonable and fair. These rates would probably hereafter be regulated by competition, either from New York or other American ports.

There is no reason why any outlay should be incurred for advertising or other expenses connected with the securing of business.

There is no reason why there should be any through-billing arrangements or accounts to adjust with other railroad and steamship lines, if the recommendation heretofore made is adopted, that the charge for transportation of freight across the Isthmus be established as an arbitrary and the settlement for this business made with the delivering or receiving companies and adjusted in cash on the Isthmus.

There is no reason why the Panama Steamship Company under governmental control should have any privileges of through billing in preference over other American steamship lines. The only arrangement necessary in regard to through billing is that all billing should be subject to the arbitrary charge, and its collection, for freight passing over the Panama Railroad.

The adoption of this policy by the administration will place it beyond and above all criticism, as all the interests in the United States—manufacturing, commercial, and shipping—will be treated exactly alike, without any discrimination, direct or indirect. The only criticism that can be made in the future will necessarily be applied to the amount of the arbitrary charges for the handling of traffic on the Panama Railroad across the Isthmus, and this can be adjusted from time to time should the rates as established be found unfair and unreasonable. There is small probability of this, as from the existing rates and circumstances the extreme variation which it will be possible to make in this rate is confined within narrow limits.

It might be well briefly to analyze the possible objections to this scheme:

(1) The Pacific Mail Company.

While this company would naturally object to the abrogation of the existing exclusive contract for through billing between San Francisco and New York and the present division of rates, the necessity for the abrogation thereof as a matter of general policy is so self-evident that no other course could be pursued.

The objection of the Pacific Mail Company to the abrogation of the existing contract naturally lies in the fact that it feels that its present line of steamships can not be maintained except under some form of monopoly which would secure it enough steady business to justify the expense of maintenance and operation, or under some adjustment of rates as would practically amount to a subsidy. It has been frequently claimed that without this no regular line would be justified in continuing in business between Panama and San Francisco; and the result would be that no through freight could be handled except freight of such a character as could be transported by special carriers or tramp steamers which might occasionally bid for this form of tonnage, and that if all comers were treated like the line boats would receive a high-class freight requiring quick transit, whereas the low-class freight would be held for the competitive rates obtained by the occasional tramp steamship, which method would so cut into the revenue of the line boats that it would necessitate their withdrawal from the service.

If it should be desired to encourage the continuance of the regular liners on the Pacific side it can be done in a perfectly legitimate way, without any interference or discrimination in the application of the freight rates of the Panama Railroad Company:

(a) By providing that boats of established lines regularly using the wharves and docks at La Boca shall be charged a specific sum for this privilege.

If this rate for the use of dock space is fixed as a regular rental, the occasional tramp steamer could not afford to pay the same dockage price as the liner. While the liner could pay a greater sum for the use of dock space per month or per year than the tramp ship, it would amount to much less per ton of freight handled or per landing; and it would seem perfectly fair and proper that the liner sailing regularly and requiring the use of docks for certain lengths of time at fixed intervals should have preference over the occasional tramp steamer, whose time of arrival and departure and of loading and unloading would be uncertain.

(b) Practically no storage facilities are now provided at La Boca, the transcontinental freight from Colon being delivered alongside ship and immediately loaded. Should shippers depend on the use of tramp steamers, it would be necessary for the railroad company to provide warehouse and storage facilities on the docks at La Boca by enlarging the same; and it would therefore seem that the railroad company would be justified in charging and collecting a certain rate per ton per day for the freight which it was necessary to accumulate or store for the arrival of a tramp or irregular steamship, over and above a certain amount of free time which should be allowed for ordinary steamship connections.

The adjustment of these matters in the way mentioned, or along some similar lines or others which might be devised, would enable regular liners on the Pacific side to be maintained in a perfectly proper and legitimate way.

(2) The merchants of San Francisco and the Pacific coast.

Any objection upon the part of these merchants will necessarily have to be confined to criticism of the arbitrary rate established for transit across the Isthmus by the Panama Railroad, as their remedy for the general situation—the right to establish a steamship line of their own between Pacific coast points and Panama—will always be open, and all they can possibly ask is that they shall receive the same treatment and the same consideration as the Pacific Mail Company in handling traffic between Panama and Pacific coast points.

These interests can certainly not object to any rate charged by the Panama Railroad for transit across the Isthmus as long as that rate can be shown to be fair and reasonable and is not materially in excess of what will be the ultimate tax on tonnage due to its passage through the Panama Canal when completed. This latter rate should certainly be the very minimum which should be expected of the Panama Railroad.

No objection can possibly be raised by these interests to such reasonable and fair rates as may be established on the Panama Railroad Steamship Company's ships between New York and Colon, as the latter rates will always be affected by competition and all comers treated alike.

(3) The transcontinental railroads.

The interests connected with the transcontinental railroads can certainly not object to the proposed arrangements, as it is not suggested that the rates over the Panama Railroad and the Panama Steamship Line shall be any less than the proportion of the through rate which is now in effect between New York and San Francisco, and which, as stated above, amounts to \$5.50 per ton; and if the rate for the Panama Railroad of \$2.50 per ton for the transportation across the Isthmus of all freight regardless of classification is put into effect it will leave \$3 per ton for the ocean rate between New York and Colon, in comparison with the existing division.

The point which I desire to make is that there would be no possibility of the through continental lines being unduly or improperly affected by this arrangement, unless competition in ocean rates between New York and Colon, by the establishment of a commercial line in competition with the Panama Steamship Line controlled by the United States, should reduce the average rate to less than \$3 per ton; and as at the very least 80 per cent of the business between New York and Colon will be freight to be used in the construction of the canal, the United States Government can well afford to operate the Panama Steamship Company at an apparent nominal loss if by this course the actual cost of freight destined for the canal is reduced sufficiently to justify it.

This is apparent when the fact is considered that at the present time the regular steamers of the Panama Steamship Company have not capacity enough to handle the amount of freight now coming to Colon, and that this service is supplemented by the United Fruit Company's steamers, which carry freight at approximately \$5 per ton.

When this business increases to four times its present volume, and it should be carried at any sum less than \$5 per ton, the United States could well afford to nominally lose on the operation of the Panama Railroad and Steamship Line, which as constituted at present does not have a capacity to handle over 20 or 25 per cent of the total amount of freight which would be required for the construction of the canal.

In other words, for every dollar which the United States Government would lose through carrying freight at less than cost, it would gain approximately \$4 by the freight carried by competitive lines in reduction of the freight rates.

To summarize and conclude, it is therefore briefly recommended:

1. That the local management, maintenance, and operation of the Panama Railroad Steamship Company and the Panama Railroad Company be conducted under separate managements; and that the receipts, disbursements, and accounts of each be kept entirely separate.

For unity of control as to policy, reports can be made to the president of the railroad company, who should be either the chairman or some member of the Isthmian Canal Commission, or if this is not advisable, some regular United States officer, reporting to and acting under the control of the Secretary of War.

REPORT OF JOSEPH L. BRISTOW.

179

2. With the separation of the two transportation functions, the rates charged by, and the policy and management of, the steamship line should be dependent upon and settled solely in the interest of the United States Government in the transportation of freight to the Isthmus, which will undoubtedly be controlled by other ocean competition.

3. The rates of freight on the Panama Railroad across the Isthmus should be reasonable, regular, and uniform, without discrimination, and the accounts and business should be handled in the most plain and simple manner which will accomplish the purpose.

Very respectfully,

JOHN F. WALLACE,
Chief Engineer.

EXHIBIT A.

Panama Railroad—Year 1903—Cost per ton freight and cost per passenger over line.

	Total.	Freight cost, 80 per cent.	Cost per ton over line.	Cost per ton mile.	Passenger cost 20 per cent.	Cost per passenger over line.	Cost per passenger mile.
General expenses.....	\$41,000	\$32,800	\$0.094	\$0.0019	\$8,200	\$0.105	\$0.0021
Conducting transportation.....	338,000	270,400	.773	.0155	67,600	.868	.0174
Maintenance of equipment.....	114,000	91,200	.261	.0053	22,800	.292	.0058
Maintenance of way and structures.....	69,000	55,200	.158	.0032	13,800	.177	.0035
Total cost on Isthmus.....	562,000	449,600	1.286	.0259	112,400	1.442	.0288
New York, general expenses.....	95,000	76,000	.217	.0044	19,000	.243	.0049
Freight tonnage being.....	350,000			.0303			
Passenger tonnage being.....	78,000						.0337

EXHIBIT B.

Freight rates per ton, March 11, 1905.

Panama Steamship Company, New York to Colon:	
First class.....	\$20.00
Second class.....	10.00
Third class.....	8.00
Fourth class.....	6.00
Fifth class (I. C. C.).....	5.00
Panama Railroad Company, Colon to Panama:	
First class.....	15.00
Second class.....	13.00
Third class.....	10.00
Fourth class.....	7.00
Fifth class.....	5.00
Pacific Mail Steamship Company, San Francisco to Panama:	
Freight.....	8.00
Royal Mail Steamship Company, Liverpool to Colon:	
Dangerous.....	a 80
First class.....	a 60
Second class (fine).....	a 35
Third class (coarse).....	a 35
Fourth class (rough).....	a 25

With 6d. per ton added for wharfage and 5s. per ton for lighterage dues.

NOTE.—Light articles are measured and 40 cubic feet charged as 1 ton.

a Shilling

EXHIBIT C.

Cargo east bound.

	Average.		Pacific Mail Steamship Company.		Panama Railroad Company.		Atlantic Line.	
	Pounds.	Rate.	Per cent.	Rate.	Per cent.	Rate.	Per cent.	Rate.
Between San Francisco and New York...	2,000	\$11.00	50	\$5.50	17½	\$1.92½	32½	\$3.57½
Between San Francisco and Caribbean ports...	2,000	15.00	45	6.75	25	3.75	30	4.50
Between Mexico and Central America and Caribbean ports...								
Between San Francisco and Europe:								
100 shillings.....								
90 shillings.....	2,240	a 18.87½	40½	7.67	24½	4.60	35	6.60½
75 shillings.....								
65 shillings.....								
60 shillings.....								
Between Mexico and New York.....	2,000	40.00	40	16.00	20	8.00	40	16.00
Between Mexico and Europe, 120 shillings.....	2,240	29.04	37½	10.89	25	7.26	37½	10.89
Between Central America and New York, \$30.....	2,000	b 32.50	40	13.00	20	6.50	40	13.00
Between Central America and New York, \$35.....								
Between Central America and Europe, 115 shillings.....	2,240	27.83	35	9.74	23½	6.49	41½	11.60
Coffee, from Mexico and Central America to New York.....	2,000	14.00	40	5.60	20	2.80	40	5.60
Indigo:								
From Mexico to New York.....	2,000	50.00	40	20.00	20	10.00	40	20.00
From Central America to New York.....	2,000	40.00	40	16.00	20	8.00	40	16.00
Coffee:								
From Mexico to Europe, 70 shillings.....	c 2,204	16.94	37½	6.355	25	4.235	37½	6.35
From Mexico to Europe, 95 shillings.....	c 2,204	22.99	37½	8.625	25	5.745	37½	8.62
From Central America to Europe, 65 shillings.....	c 2,204	15.73	35	5.505	23½	3.67	41½	6.555
From Central America to Europe, 90 shillings.....	c 2,204	21.78	35	7.625	23½	5.08	41½	9.075
From Puntarenas to Europe, 60 shillings.....	c 2,204	14.52	35	5.08	23½	3.39	41½	6.05
From Puntarenas to Europe, 80 shillings.....	c 2,204	19.36	35	6.77	23½	4.52	41½	8.07
Indigo:								
From Mexico to Europe, 175 shillings.....	2,240	42.35	37½	15.88	25	10.59	37½	15.88
From Central America to Europe, 165 shillings.....	2,240	39.93	35	13.97	23½	9.32	41½	16.64
Coffee:								
From Mexico and Central America to New Orleans.....	2,000	14.00	45	5.30	25	3.50	30	4.20
From Puntarenas to New Orleans.....	2,000	10.00	45	4.50	25	2.50	30	3.00

a Average, 78 shillings, or \$18.87½.

b Average.

c 1,000 Ks.

N. B.—From above Pacific Mail Steamship Company's proportion deduct 80 cents for wharfage and 10 cents for crantage at La Boca.

Approximate rates on cargo west bound.

	Average.		Pacific Mail Steamship Company.		Panama Railroad Company.		Atlantic Line.	
	Pounds.	Rate.	Per cent.	Rate.	Per cent.	Rate.	Per cent.	Rate.
From New York to Central America.....	2,000	\$15.00	40	\$6.00	20	\$3.00	40	\$6.00
From New York to Mexico.....	2,000	16.80	40	6.72	20	3.36	40	6.72
From New York to San Francisco.....	2,000	12.00	50	6.00	17½	2.10	32½	3.90
From Europe to Central America.....	2,240	19.70	35	6.90	23½	4.60	41½	8.20
From Europe to Mexico.....	2,240	27.57	37½	10.34	25	6.89	37½	10.34
From Europe to San Francisco via Royal Mail Steam Packet Company, 86s., 8d.....	2,240	16.13	40½	6.55	24½	4.03	35	5.64
From Europe to San Francisco via Leyland Line.....	2,240	21.70	40½	8.81	24½	5.29	35	7.60

N. B.—From above Pacific Mail Steamship Company's proportion deduct 80 cents for wharfage and 10 cents for crantage at La Boca.

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List of approximate rates on freight forwarded from Panama to Central America, Mexico, and San Francisco.

From:	
New York to Central America.....	\$6.50
New York to Mexico.....	7.00
New York to San Francisco.....	8.00
From Europe via Royal Mail Steam Packet Company:	
Central America.....	6.50
Mexico.....	7.50
San Francisco.....	10.00
From Europe via Hamburg American Line, Leyland Line, Harrison Line, Compagnie Transatlantique, Compagnie Transatlantica de Barcelona, Le Veloce Line, Austro-Americana Line:	
Central America.....	5.50
Mexico.....	6.00
San Francisco.....	9.00
Specie, all lines, $\frac{1}{2}$ per cent.	
Parcels, all lines, \$1 per cubic foot. Each additional foot, 50 cents per cubic foot.	

H. E. A. CARLTON, Auditor.

[Hon. Joseph L. Bristow, Isthmian Canal Commissioner. Copy.]

PANAMA, March 23, 1905.

Rear-Admiral JOHN G. WALKER, U. S. Navy,
 Chairman, Isthmian Canal Commission,
 Washington, D. C.

SIR: It is recommended that the Commission secure a still further reduction in the rates on Government freight over the Panama Railroad Steamship Line for the use of the canal construction. It would seem just and proper that the surplus earnings of this steamship line should not be unduly enlarged or created by the business furnished by the United States Government, the largest stockholder in the enterprise.

As the chief engineer feels that he will ultimately be held responsible for the cost of the construction of the canal, and as the profits from the Panama Railroad Steamship Company which fall to the share of the United States are covered into the Treasury and are not credited to the canal appropriation, it does not seem fair that the cost of canal construction should be fictitiously enlarged, as it will be, to the extent which the United States Government and the minority stockholders of the steamship company receive dividends.

The equity of the situation would seem to be that the United States Government is certainly entitled to as low a rate for the transportation of its material and supplies as it is possible for the Panama Railroad Steamship Line to make without loss. It is certainly entitled to as low rates as may be given to any other shipper using that line. These would seem to be at least fundamental propositions.

That large profits have been made by the Panama Railroad Steamship Line during the last year, due to the business furnished by the United States Government, is self-evident, and the comparative statement of the net earnings of the transportation company since the canal construction commenced, as compared with the previous years, bears out this statement. That these undue profits will rapidly increase from now on is also self-evident.

As is well known, a large part of the business of the Panama Railroad consists in through business between San Francisco and New York. The data which has been furnished the chief engineer shows that the through rate is \$11 per ton, regardless of classification or character of goods. It also shows that the Panama Railroad Company receives only \$1.92 $\frac{1}{2}$ for the transportation of this freight across the Isthmus of Panama from ship's side to ship's side, and the Panama Railroad Steamship Line \$3.57 $\frac{1}{2}$ for the transportation of the business from New York to Colon, the combined rate from New York to Panama being \$5.50 per ton on freight destined to San Francisco.

As against this the Isthmian Canal Commission is charged \$5 per ton on freight from New York to Colon, and \$2 from Colon to Panama, a total rate of \$7 per ton for the same service and the same distance, with the exception that the Panama Railroad does not have to stand any proportion of the cost of unloading the freight consigned to the Isthmian Canal Commission, which cost, considering the nature of the freight handled and the larger number of tons which can be loaded per car, is at least equivalent to 25 cents per ton, making a practical discrimination against the Commission of the difference between \$5.25 and \$7 per ton, or \$1.75.

While there may be competition between New York and Panama necessitating a lower rate on this business, there is no reason why the Isthmian Canal Commission should not be entitled to as low a rate.

It is not to be presumed that the Panama Railroad Steamship Company is carrying the San Francisco business at a loss. It is to be presumed that it makes a fair and reasonable profit out of this business, as otherwise there would be no justification from a commercial standpoint for the operation of the steamship line by the Panama Railroad Company between New York and Colon. It certainly would not maintain a large and extensive organization in New York to strive after additional through business between New York and San Francisco if there was not a material profit in these rates.

Whatever may be the excuse for charging high rates to other points where there is no competition, there would seem to be no valid reason or justification for the high rates now charged the Isthmian Canal Commission on its business.

Even if the New York and San Francisco business is carried at a loss, it is not clear why the Isthmian Canal Commission should be taxed to make good or compensate the Panama Railroad and Steamship Line for the amount it loses on other business. That line should certainly not be subsidized to this extent from the appropriations of the Isthmian Canal Commission for the purpose of maintaining through transcontinental competition.

That the business has been a profitable one is so self-evident that it is hardly worth while to make an argument on that line.

The fact that the Panama Railroad Steamship Line paid an 8 per cent dividend in 1903 out of its accumulated earnings would be sufficient argument.

A collateral feature of the question of rates is the high rate which the Isthmian Canal Commission is required to pay on freight from New Orleans shipped by the United Fruit Company's steamers. The question immediately presents itself as to why the traffic officials of the Panama Railroad Steamship Line should be called upon to negotiate for or in any way assist in the securing of rates by rival lines.

No matter how well disposed those officials may be toward the Isthmian Canal Commission, their entire education and trend of thought has naturally been toward using every possible effort and all means at their command to build up and increase the earnings of the Panama Railroad Steamship Line.

By having the power to grant or deny to the United Fruit Company the right of through billing over the Panama Railroad as an inducement to make such rates between New Orleans and Colon as might be satisfactory to the Panama Railroad Company, it would seem that the traffic officials of the latter company are able to dictate the rates which the United Fruit Company should charge on freight between New Orleans and Colon.

This being the case, it does not seem equitable that this power should be used to increase the cost of the construction of the canal through inducing the United Fruit Company to charge a high rate on freight destined to the canal.

Granting that the business for the Isthmian canal will largely increase, and that the steamships of the Panama Railroad and Steamship Company will not be able to furnish sufficient tonnage therefor, it is evident that while the United States Government may receive back in dividends from the Panama Railroad Company a large proportion of the excessive rates charged on its shipments, it will lose many times this amount through the high rates which it will be compelled to pay on supplies handled by the United Fruit Company and by other lines, which will no doubt base their charges, to some extent, at least, on the rates charged by the Panama Railroad Steamship Line.

Considering the vast tonnage which it will be necessary to ship to the Isthmus during the next ten years, it requires no complicated mathematical calculation to show that the cost of the construction of the Panama Canal will be enhanced by many millions of dollars if the existing freight rates are not reduced.

In conclusion, the fact should be considered that there has been a good and reasonable profit in the proportionate rates on through business received by the Panama Railroad Steamship Line, and while the Isthmian Canal Commission can not ask that its business be carried at a direct loss, it can ask that no notable profit shall be made thereon.

If comparison is made with the rates which the United States Government pays for the transportation of freight between New York and the Philippines, and also with the rates which are charged in the United States for similar service, it will be evident that \$3 per ton as an ocean rate from New York to Colon, and \$1 from Colon to Panama, is liberal compensation to the Panama Railroad Steamship Company and the Panama Railroad Company for the handling of the Commission's business, and it is recommended that the matter be adjusted on this basis.

Very respectfully,

Chief Engineer.

Respectfully referred to Hon. Joseph L. Bristow for his information.

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EXHIBIT D.

LIST OF QUESTIONS SENT TO AMERICAN CONSULS AND CONSULAR AGENTS IN SOUTH AMERICA.

COLON,

Isthmus of Panama, February 17, 1905.

MY DEAR SIR: As indicated in a letter from the Secretary of State, which, doubtless, you have received, I beg to make the following inquiries, and to ask that you forward your reply to me at Washington:

What is the course of the commerce from the United States and Europe to Guayaquil, and from Guayaquil to the United States and Europe? What per cent of it is transported by the way of Panama and what per cent by the way of Magellan?

What is the difference in the freight rates from New York to Guayaquil and from Guayaquil to New York, by the way of Panama and by the way of Magellan?

What is the difference in the freight rates from Europe to Guayaquil and from Guayaquil to Europe, by the way of Panama and by the way of Magellan?

Are there any impediments that prevent the successful movement of freight to and from New York and Europe by the way of Panama? If so, please state them in detail.

What are the principal products exported and imported at this port to and from the United States?

What are the principal products exported and imported at this port to and from Europe?

What are the principal products and resources of the country in the vicinity of this port?

Are the resources of the country well developed?

Please give the information asked for above as to Ballenita also.

An early and full reply as quickly as is convenient to you would be greatly appreciated.

Very respectfully,

(Signed) J. L. BRISTOW,
Special Panama Railroad Commissioner.

To HON. HERMAN R. DIETRICH,
American Consul-General, Guayaquil, Ecuador.

This letter sent to the following also:

Bahia de Caraquez, Ecuador, Alberto Santos, consular agent.

Esmeraldas, Ecuador, Ferdinand Servat, consular agent.

Manta, Ecuador, Paul Gonzenbach, consular agent.

Callao, Lima, Tambo de Mora, Pisco, Chala, Peru, Alfred L. M. Gottschalk, consul.

Mollendo and Ilo, Peru, Enrique Meier, consular agent.

Payta, Peru, Louis Blacker, consular agent.

Salaverry and Huaraz, Peru, George W. Chase, consular agent.

Eten and Pacasmay, Peru, Theodore Stechmann, consular agent, at Chiclayo, Peru.

Arica, Chile; also Taena, John W. Lutz, consul.

Antofagasta, Copija, El Cobre, and Taltal, Chile, Charles C. Greene, consul.

Iquique and Pisagua, Chile, Charles S. Winans, consul.

Valparaiso, Illapel, and Quillota, Chile, Robert E. Mansfield, consul.

Caldera, Chanaral, Huasco, and Carizal Bajo, Chile, John C. Morong, consular agent.

Coquimbo, Chile, Andrew Kerr, consular agent.

Coronel, Chile, Benjamin R. Robertson, consular agent.

EXHIBIT D 1.

Answer of American consul-general at Guayaquil, Ecuador.

AMERICAN CONSULATE-GENERAL,
Guayaquil, Ecuador, March 23, 1905.

HON. JOSEPH L. BRISTOW,
Special Panama Railroad Commissioner Washington, D. C.

DEAR SIR: I have the honor to reply to your letter from Colon, Isthmus of Panama, dated February 17, 1905.

As the official report on commerce for last year is not published yet, I take the year 1903 as the basis for my report to you.

The imports from the United States and Europe to Guayaquil during 1903 were 35,082 tons.

The exports from Guayaquil to the United States and Europe were 44,938 tons, and it is estimated that about 30 per cent of the imports and exports go and come by the way of Magellan, and the remainder of 70 per cent by Panama.

Steamer freight rates from Guayaquil to New York via Panama on the principal articles of export are as follows, in United States currency, per ton of 2,240 pounds:

Cocoa, \$17; coffee, \$17; hides, \$22.50; rubber, \$27.50; ivory nuts, \$12; while freights

to New York via Magellan are for Cocoa, £1 15s.; coffee, £1 15s.; hides, £3; rubber, £3; ivory nuts, £1 12s. 6d., which shows the enormous difference in freights by the two routes.

Steamer freight rates to Europe via Panama are as follows, per ton of 1,000 kilos:

Cocoa, £3; coffee, £3; hides, £3 10s.; rubber, £5 and 5 per cent; ivory nuts, £2 10s.; while, via Magellan, shippers only pay for cocoa, £2 5s.; coffee, £2 5s.; hides, £3 5s.; rubber, £3 5s.; ivory nuts, £2.

The steamer freight rates from Europe to Guayaquil via Panama are as follows: First-class merchandise, £3; second-class merchandise, £2 10s.; third-class merchandise, £2 2s. 6d.; and via Magellan, first-class merchandise, £2 5s.; second-class merchandise, £2; third-class merchandise, £1 15s.; fourth-class merchandise, £1 7s. 6d., per ton, gross weight or measurement at steamer's option.

The real impediment that prevents the sending of more cargo across the Isthmus, apart from the high rate of freight, is the obstructive monopoly which has existed for many years and exists yet by the signed contracts between the P. R. C. and the several steamship lines.

The P. S. N. Co. and the C. S. A. de V. are the only companies that can receive freights from here for New York and Europe via Panama, signing through bills of lading, as per agreement with the Panama Railroad, closing out entirely the other steamship companies who would call for cargo at Guayaquil, but who can not take cargo for New York nor Europe, not having the same agreements with the Panama Railroad. If they would call at Panama, the cargo they carry would have to be shipped from there as local freight, paying the high tariff, and would consequently cost much more than shipped by the P. S. N. C. or the C. S. A. de V.

Steamers of the Kosmos, Lampert & Holt, Gulf Line, and Transatlantic call here frequently, but can not take any cargo for Panama on account of the reasons given above.

The principal products exported to the United States are cocoa, hides, rubber, ivory nuts, and straw hats, and this Republic imports principally from the United States flour, kerosene, lard, lumber, railroad material, machinery, hardware, shoes, and cotton goods.

The principal product of the vicinity of this port is cocoa. The yearly crop amounts to over 50,000,000 pounds.

The resources of Ecuador are only developed along the coast, with a very small degree in the interior.

Ballenita is a very small port at about 150 miles north from here. Nothing is imported nor exported from there.

In order that you may have full knowledge of the present resources of Ecuador I have prepared, and send you herewith inclosed, the following tables:

Table No. 1 shows the total exports from Ecuador, giving the quantity of each of the eight ports separately. The total exports were 51,303 tons.

Table No. 2 shows to which countries those 51,303 tons went.

Table No. 3 gives the total imports to Ecuador to the five ports of entry. The totals were 40,738 tons.

Table No. 4 shows from which countries the imports were made.

Regarding freight rates from New York to Guayaquil via Panama and via Magellan, I have not been able to obtain any definite information.

I am, dear sir, yours, very respectfully,

HERMAN R. DIETRICH, *Consul-General.*

TABLE NO. 1.

Total exportation from Ecuador during 1903 from each port, by tons.

Month.	Guayaquil.	Puerto Bolivar.	Santa Elena.	Cayo.	Machalilla.	Manta.	Bahia de Caraquez.	Esmeraldas.
January.....	1,272	34	2	90	288	286	387	353
February.....	1,745	218	15	85	79	96	140	207
March.....	1,868	31	13	30	68	55	127	311
April.....	3,650	21	13	48	75	71	176	326
May.....	2,758	143	94	17	110	127	573	250
June.....	1,695	12	10	51	51	124	118	471
July.....	4,092	164	35	99	407	272	521	159
August.....	2,884	199	17	100	480	548	389	328
September.....	3,940	122	116	138	401	856	977	502
October.....	3,195	155	23	330	503	1,267	708	510
November.....	2,089	16	1	173	207	546	333	342
December.....	3,061	77	59	161	116	583	147	332
Total.....	32,258	1,162	398	1,292	2,785	4,831	4,306	4,181

Total, 51,303 tons.

AMERICAN CONSULATE-GENERAL,
Guayaquil, Ecuador, March, 1905.

TABLE No. 2.

Total exports from Ecuador during the year 1903, by tons, to the various countries.

United States of America.....	10,686
Germany.....	14,885
France.....	9,819
England.....	4,698
Chile.....	4,371
Spain.....	2,049
Italy.....	1,791
Peru.....	1,282
Holland.....	1,010
Colombia.....	517
Various.....	195
Total.....	51,303

GUAYAQUIL, ECUADOR, March, 1905.

TABLE No. 3.

Total imports into Ecuador during the year 1903 through the various ports, by tons.

Month.	Guayaquil.	Manta.	Bahia.	Esmeraldas.	Puerto Bolivar.
January.....	2,102	80	68	270	287
February.....	3,170	48	48	61	121
March.....	3,409	191	32	25	14
April.....	2,076	279	120	52	30
May.....	710	99	16	35	236
June.....	1,445	75	23	23	45
July.....	2,867	74	49	23	44
August.....	3,197	87	50	21	96
September.....	2,657	186	214	28	18
October.....	6,656	228	243	79	42
November.....	3,145	165	98	18	88
December.....	4,874	74	133	43	50
Total.....	36,308	1,586	1,094	678	1,071

Total tons, 40,738.

AMERICAN CONSULATE-GENERAL,
Guayaquil, Ecuador, March, 1905.

TABLE No. 4.

Total imports into Ecuador during the year 1903, by tons, and from the various countries.

United States of America.....	14,600
England.....	10,600
Germany.....	4,894
Peru.....	3,542
France.....	1,860
Chile.....	1,585
Belgium.....	1,346
Spain.....	978
Italy.....	805
Various.....	528
Total.....	40,738

GUAYAQUIL, ECUADOR, March, 1905.

EXHIBIT D 2.

Answer of American consular agent at Bahia de Caraquez, Ecuador.

CONSULAR AGENCY OF THE UNITED STATES OF AMERICA,
Bahia de Caraquez, Ecuador, March 14, 1905.

Hon. J. L. BRISTOW,

Special Panama Railroad Commissioner, Washington, D. C.

SIR: In compliance with your circular dated February 18, I beg to submit you the following report:

All the commerce between the United States and Bahia de Caraquez, and vice versa, is made by the way of Panama. There is no established line of steamers between the ports of the United States and Bahia de Caraquez; and should a merchant of this port wish to have his goods transported by the way of Magellan he should charter a vessel specially for the purpose; and as the amount of freight required by the shipowners is far above the necessities of the traffic in this place, the profit of a low rate of freight would be absorbed by his loss in the interests and storage charges of the merchandise during the time required for its selling. That is the real reason why all the cargo from and to the United States is transported through the Isthmus, in spite of the enormous freights charged by the Pacific Steam Navigation Company and the Panama Railroad Company.

As to the cargo from and to Europe, it is quite a different thing. There is an established line of steamers between European ports and this coast—the Kosmos Line—by way of Magellan; and as the rates of freight are much lower than by the way of Panama, two-thirds of the goods we purchase from Europe come by the strait, and many things that otherwise we would buy from the United States are purchased in Europe, in order to avail ourselves of the lower rates of freight the Magellan route affords us.

From Europe we have twice or three times a year a sail ship and once a month a German Kosmos steamer.

The freight rates are as follows:

From Europe: Sail ships, via Magellan, 20s. to 25s. per ton; Kosmos Line, via Magellan, 32s. 6d. to 45s. per ton; Kosmos Line, via Panama, 57s. 6d. per ton.

From New York: Panama Railroad Company's steamers and railway charge, 50 cents per cubic foot of general merchandise, equal to \$20 per ton, or 80s.

To Europe: Sail ships, by way of Magellan, 27s. per ton; Kosmos steamers, by way of Magellan, 60s. per ton; Kosmos steamers, via Panama, 80s. per ton.

To New York: Panama Railroad Company's steamers, \$17, equal to 68s. per ton.

For the forgoing rates I have taken that of general merchandise for imports and that of cocoa for export to make a comparison easier.

These figures speak for themselves; they show us that the rates from New York, 80s. per ton, are almost fourfold those from Europe, although New York is at a half of the distance that separates us from Europe. Were it not that there are certain goods, such as kerosene oil, lard, and cotton stuffs, that forcibly must be purchased in the United States, this difference in freight rates could successfully accomplish the aim they seem to have been made for—the annihilation of all trade between this coast and the United States.

There is another powerful obstacle for the development of our commerce with the United States, the monopoly of the traffic at this side of the Isthmus by the British Pacific Steam Navigation Company. The merchant whom sheer necessity compels to have his goods transported by this line's steamers is well aware that he must submit to have his cargo short of one or two packages for every shipment and the balance he receives in such a condition as if handled by vandals instead of British seamen; plundered the contents, and the packages broken or torn; and to all his applications for any indemnification, the company's scornful silence is the answer he gets. So that with the plotting together of the Pacific Steam Navigation Company's monopoly at this side and the Panama Railroad Company's at the other it is a wonder that there is still any commerce left with the United States.

Our imports from the United States consist chiefly of kerosene oil, flour, lard, cotton goods, and some machinery, and from Europe we import the rest of the goods we want. There are no industries at this place, and almost everything necessary for life must be brought from abroad.

To pay for these imports, we export to the United States india rubber, cocoa, hides, and a small quantity of ivory nuts; and for Europe the greater part of our cocoa, almost all the ivory nuts, coffee, and sometimes india rubber.

The resources of this country consist mainly of ivory nuts, which are freely picked up in the woods; cocoa, the cultivation of which is slowly but steadily increasing; india rubber, found, like the ivory nuts, in the woods, but in small quantities, because the natives used formerly to cut down the trees to get the gum, and coffee, which was once widely cultivated, but has been partially abandoned, due to the fall of its price by the competence of the Brazilian big crops.

There are immense tracts of land fit for every cultivation that remain barren and uncultivated for the lack of laborers and means of communication. We could produce in our lands

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by the seaside enough bananas and coconuts for the whole consumption of the United States, but with such freight rates as now exist their transportation to the market is impossible, and we must remain with folded arms until the Panama Canal is opened. We have rich mines, but the high rates do not allow us to import machinery to work them. We have thousands of miles of land where henequen grows as good as in Yucatan, but we can not even think of making use of it, because the high freight rates would amount to a greater value than the fiber is worth, etc.

I hope this report will be useful to you.

Yours, respectfully,

ALBERTO SANTOS,
American Consular Agent.

EXHIBIT D 3.

Answer of American consular agent at Esmeraldas, Ecuador.

CONSULAR AGENCY OF THE UNITED STATES OF AMERICA,
Esmeraldas, Ecuador, April 8, 1905.

Hon. J. L. BRISTOW,
Special Panama Railroad Commissioner,
War Department, Washington, D. C.

SIR: In answer to inquiries contained in your letter of the 18th of February, I beg to say:

1. Almost all of the products exported from here to the States and to Europe are forwarded via Panama; the little that goes by the way of Magellan is shipped per the agent of the Kosmos steamers, which run from San Francisco to Hamburg, touching all along the coast.

2. Vegetable ivory nuts, which is the principal product exported from here, pays £2 5s. of freight to Europe via Panama, and I think £2 via the straits. Nothing is exported from here to the States unless per the way of Panama.

3. Very little goods being imported via the straits; rates are not known here.

4. There is none that I know of. The firm I am a member of (Dumarest Brothers & Co.) has made contracts with the Panama Railroad for the last eight or ten years. Last year we made one to ship 1,500 tons of ivory nuts, and shipped over 2,000.

5. Principal products shipped to the States are the vegetable ivory nuts and rubber; importation from the States is principally of provisions, hardware, and dry goods.

6. Ivory nuts, hides, and cocoa, and from Europe to this port provisions (rice), dry goods, and hardware.

7. Those enumerated in answers 5 and 6.

8. Rubber and nuts grow wild; cocoa, there is still very little.

Hoping that my answer will be of use to you, I remain,

Yours, very respectfully,

RENE DUMAREST,
American Consular Agent.

EXHIBIT D 4.

Answer of American consular agent at Manta, Ecuador.

CONSULAR AGENCY OF THE UNITED STATES OF AMERICA,
Manta, Ecuador, March 18, 1905

Hon. JOSEPH L. BRISTOW,
Special Panama Railroad Commissioner,
War Department, Washington.

SIR: I am in receipt of your favor dated Colon, February 18, and have now the pleasure to answer the questions therein contained.

The following are the imports made at this port during the year 1904:

	Kilograms.
Via Panama.....	1,589,612
Via Magellan.....	863,945
From West Coast.....	329,923
Total.....	2,783,480

And these the exports:

Via Panama.....	4,322,571
Via Magellan.....	1,112,272
To West Coast.....	212,251
Total.....	5,647,094

Total freight movement at this port, 8 430,574 kilos.

It is to be noted that the import via Magellan has considerably increased, owing to the fact that the steamship lines which are connected with the Panama Railroad Company charge a higher freight from and to the ports north of Guayaquil than from Guayaquil itself, which is, no doubt, due to the influence of the commerce of said port. In order to be able to compete with Guayaquil, the merchants of this coast have been obliged to bring goods on sailing vessels, of which there were three at this port only lately. With equal freights all the inward cargo would be brought via Panama. The small part of the outward cargo shipped via Magellan consists almost exclusively in ivory nuts in "bulk," which can not be shipped via Panama, because a considerable loss in weight would be the consequence of so much handling of the cargo across the Isthmus.

There was never any cargo from this port sent via Magellan to New York, so no freight tariff exists, and only occasionally a steamer brings cargo from New York to Manta via Magellan, in which case the freight is arranged on private terms between shipper and shipowner, and is usually about 15 to 20 per cent cheaper than via Panama.

The following are the freight rates from Manta to New York via Panama:

	Per ton of 2,240 pounds.
Cocoa.....	\$17. 00
Coffee.....	\$17. 00
Ox hides.....	\$27. 50
Rubber.....	\$35. 00
Ivory nuts.....	\$12. 00
Treasure (per cent of value).....	1½

And these are the freight rates of the principal articles imported from New York via Panama.

Petroleum, in cans, boxed	per cubic foot..	\$0. 30
Lard, barbed wire, etc	per 100 pounds..	. 75
General merchandise.....	per cubic foot..	. 37½

The freight rates from Manta to Europe compare as follows:

	Via Panama.	Via Magellan.
	£ s. d.	£ s. d.
Cocoa	per ton of 1,000 kilos..	3 10 0
Coffee.....	do.....	3 10 0
Ox hides.....	do.....	3 0 0
Rubber.....	do.....	3 0 0
Ivory nuts.....	do.....	3 10 0
		2 5 0

^a And 5 per cent.

The freight rates on the inward cargo vary according to the kind of goods, but in general steamer freight via Magellan is about 20 per cent and freight by sailing vessel about 30 to 40 per cent cheaper than via Panama.

There are no impediments that prevent the successful movement of freight via Panama, except that there is more handling of the cargo, which of course can not be avoided; for this reason breakable goods are always received via Magellan. Another inconvenience which all merchants complain about is the loss by pilfering, which is only too frequent on the Isthmus.

The principal exports to Europe consist in ivory nuts, cocoa, and coffee, and the imports in rice, soap, beer, liquors, earthenware, cement, candles, etc.

To the United States this port ships ivory nuts, cocoa, ox hides, and rubber, and receives from there petroleum, lard, flour, dry goods, hardware, canned goods, etc.

The chief resource of the vicinity of this port is the ivory nut, of which over 5,000 tons were exported during the last year. The cultivation of cocoa and coffee and india rubber is increasing every year. Another resource of this province is the manufacturing of the so-called Panama hats, of which the finest are made at Montecristi, a town about 7 miles from this port. A great number of them are exported to the United States and Europe.

I am, sir, yours, very respectfully,

P. GONZENBACH,
American Consular Agent.

Hon. J. L.
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EXHIBIT D 5.

Answer of American consul at Callao, Peru.

CONSULATE OF THE UNITED STATES OF AMERICA,
Callao, Peru, April 19, 1905.

Hon. J. L. BRISTOW,
Special Panama Railroad Commissioner,
Washington, D. C.

SIR: Referring to my former communication (of March 13 last past), I now take pleasure in forwarding the data asked for in yours of February 18, which had not reached me in complete form until yesterday.

1. Your first question can only be answered approximately. I think the following approximates of the percentage of commerce done between Callao and the United States by the several routes are about correct:

From Europe, via Isthmus, about 50 per cent; via Straits, about 50 per cent. From the United States, via Straits, about 75 per cent; via Isthmus, about 25 per cent.

2. It is generally considered about 25 per cent cheaper to import from New York to Callao via the Straits than via Isthmus.

Cost of sending from Callao to New York varies; sugar freights cost generally 5s. extra per ton via Isthmus—all bulky goods are expensive to send that way. Cotton costs about the same by both routes.

3. All importers from Europe to Peru seem to agree that 25 per cent is saved on freights by importing via Straits of Magellan.

4. The principal argument against shipping via Isthmus is the transshipment there and consequent loss in weight. There is also much talk against the Panama Railroad and its officials (although whether this is mere spite or not I do not know), who are considered arbitrary, discourteous, etc.

5. We import to Peru all kinds of American manufactured goods, provisions, etc., and machinery.

During 1903 (the last year for which statistics are available) Peruvian imports were as follows, with Great Britain heading the list and the United States coming second:

	£ (Peruvian).
Great Britain	1,486,438.113
United States	579,901.859
Germany	448,315.113
Belgium	231,071.859

Our exports to the United States from Peru are cotton and minerals first, sugar, coca leaf, wools (both sheep and alpaca), goat skins, hides (only very few since the bubonic quarantines have come into effect), and straw hats.

6. This coast has for a long time been tributary, in a commercial way, to England; the inroads upon British commerce by German, American, and Belgian trade are comparatively recent. Much is still imported from England, owing to the number of British firms here—prints, cotton goods, woollen goods, canned goods, and agricultural machinery. The same is in a lesser degree true of Germany and Belgium as markets for imports to Peru. Peru sends practically the same products (minerals perhaps excepted) to Europe as she does to the United States.

If a firm has connections both in the United States and Europe, it will generally import articles of a breakable nature and heavy things generally from Europe via the Straits, to avoid transshipment. Our only line via the Straits to the United States is the Merchants' Line, belonging to W. R. Grace & Co., who have a big business of their own here, and are not liked as carriers by most local importers.

7. Callao ships chiefly minerals and coca leaf.

8. The resources of Peru are susceptible of very much future development, with the building of various railroad lines projected or now under way.

9. Tambo de Mora and Pisco ship chiefly cotton. Tambo also ships some sugar. Pisco also some metals. The port of Chala ships sheeps' wool, alpaca, and some metals.

I regret very much to say that it is difficult for me to report fully, owing to the fact that the firm of Grace & Co. decline to give their exact freight rates (Merchants' Line, to New York via Straits). I am told that their freight rates vary to suit local competition and I believe the statement to be correct. There are no direct independent steamers from the States via Straits. The Merchants' Line's printed tariff would doubtless be obtainable from Messrs. W. R. Grace & Co. in New York.

I have the honor to inclose the following:

1. Tariff of Pacific Steam Navigation Company and Cia Sud-Americana de Vapores, which work in combination from Valparaiso to Ancon, Canal Zone, and also for England direct via west coast of South America.

2. Tariff of Kosmos Line, working from Europe via Straits to west-coast ports of South America, San Francisco, and Puget Sound.

Respectfully,

A. L. M. GOTTSCALK, Consul.

The Pacific Steam Navigation Company and Compañia Sud-Americana de Vapores.

A note of current rates for New York via Isthmus as follows:

Sugar.....	£1 10s.
Hides, dry (American gold).....	\$30. 00
Caoutchouc (American gold).....	\$22. 50
Coca leaves (American gold).....	\$30. 00
Coca leaves for New Orleans (American gold).....	\$40. 00
Cotton.....	£3 10s.
Cotton for Boston.....	£4
Specie and cocaine (per cent).....	1½
Sulphide of silver (per cent).....	1½
Sulphide of silver with transshipment at Callao (per cent).....	1½
General merchandise, per ton (American gold).....	\$40. 00

Weight or measure at company's option.

These rates are subject to modification for special lots of cargo, as may be agreed.

EXHIBIT D 6.

Answer of American consular agent at Payta, Peru.

PAYTA, March 22, 1905.

Hon. JOSEPH L. BRISTOW,

Washington, D. C.

MY DEAR SIR: I have to acknowledge receipt of your esteemed favor of the 18th ultimo, to which I have to-day pleasure in replying.

1. The commerce from the United States to Payta, transported via Panama, is calculated to be 75 per cent; the remainder comes by the way of Magellan.

From Payta to the United States the total of the cargo goes via Panama. The Pacific Steam Navigation Company and Cia Sud-Americana de Vapores do not even accept any freight whatever for the United States via Magellan from this port. I do not know if it is the same down the coast.

The amount of freight transported from this port to Europe via Panama is decidedly small, as only 20 per cent is calculated to go through that port; the reason is that the kind of cargo exported to Europe, viz, cotton seed, cotton-seed cake, and cotton, would not stand the heavy rates charged via Panama, especially the first two articles.

2. With regard to freights, I give you in a separate note a detailed list of all, so you may be able to judge better.

3. Far from there being any impediments, there are to-day a good many advantages in importing all kinds of merchandise via Panama, as, due to freights having been raised via Magellan, merchants here have given orders that everything in future be sent via Panama, by which route they save at least two months' time; this advantage is for imports both from the United States and Europe. Exports for Europe are not in the same conditions, for the reasons I have already given. Respecting those to the United States, not a single package goes via Magellan, because both the time gained and freights make it more advantageous via Panama.

4. Principal imports from the United States are lard, kerosene, flour, lumber, agricultural and industrial implements, dry cotton goods in small scale, tools in general, tinned fruits, and meats, lamps, sewing machines, confectionery, and several other articles in a small scale. I may add that I have noticed in the last year or so, a decided increase in the importation of American goods. It is only in dry goods that no increase is noticed. England in the first place and Germany next hold the market in this line.

Imports from Europe may be summed up in general merchandise.

Exports to the United States from this port are cotton, goatskins, straw hats (called Panama hats), hides, and a little condurango. It may interest you to know that ten years

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ago not one-hundredth part of the cotton exported to-day to the United States via Panama used to go that way; all was shipped by the way of Magellan and to England. To-day it might be said that only the colored cotton goes to England via Magellan, and via Panama neither white nor colored. This change is due to the demand in the United States for rough Peruvian cotton, which to-day finds there a very good market. Almost all the cotton exported to the United States is sold f. o. b. Payta.

Exports to Europe are cotton, cotton seed, cotton seed cake, straw hats, condurango, Peruvian bark, hides, and very little coffee.

The principal products of this country are agricultural and are those above stated.

There are some petroleum mines in this district, viz, the London and Pacific Petroleum Company, Limited, of Talara Bay; the Peruvian Petroleum Syndicate of Lobitos, and another field which has been recently discovered and for the working of which a company is being formed in Lima, Peru. The owner or discoverer is Mr. N. J. Taiman, an American citizen, manager of the waterworks of this port and Pura. The two first companies are English. The London and Pacific Petroleum Company is the only one of the three which is giving any production at present; 2,000 to 2,500 tons is the monthly output of this company. The oil is all sold at Callao, Peru, and Caleta Buena, Chile, but there are markets for three or times the above production. Cattle is one of the resources of this department, and is exported to Lima in fairly big numbers.

I trust that all the above information will be useful to you.

I beg to remain, sir, very respectfully, yours,

LOUIS BLACKER, *American Consular Agent.*

Note of freights from Payta to New York, via Panama.

General merchandise.....	\$40. 00
Cotton.....per ton of 2,240 pounds..	£3 10s.
Hides.....do.....	\$30. 00
Goatskins.....do.....	\$25. 00
Peruvian bark.....do.....	\$45. 00
Straw hats (Panama hats).....per ton of 40 cubic feet..	\$52. 00
Condurango.....per ton of 2,240 pounds..	£5

Minimum rate for bill of lading, \$10 per ton of weight or measurement at company's option.

From Payta to Europe via Panama:	£ s. d.
Cotton.....per ton of 40 cubic feet..	1 5 0
Cotton.....per ton of 2,240 pounds..	5 0 0
Hides.....per ton of 1,000 kilos..	4 0 0
Coffee, for London.....do.....	3 0 0
Coffee, for Havre, Hamburg, and Bremen.....do.....	3 0 0
Coffee, for Antwerp and Rotterdam.....do.....	4 0 0
Peruvian bark.....do.....	6 0 0
Cotton-seed cake.....do.....	3 2 6
Goat skins.....do.....	4 0 0
Cotton seed.....do.....	3 0 0
General merchandise.....1,000 kilos or 40 cubic feet..	5 0 0
Straw hats (Panama hats) 5 per cent.....per ton of 40 cubic feet..	12 0 0
Condurango.....per ton of 1,000 kilos..	5 0 0

From Payta to Europe via Magellan:	£ s. d.
Peruvian bark, for London.....per ton of 2,240 pounds..	5 0 0
Hides.....do.....	4 10 0
Goatskins.....do.....	4 0 0
Cotton-seed cake.....do.....	1 17 6
Cotton seed.....do.....	1 17 6
Merchandise.....per ton weight or measurement..	3 10 0
Cotton.....per ton of 2,240 pounds..	4 0 0

From New York to Payta via Panama: General merchandise, \$10 per ton of 40 cubic feet.

From Europe to Payta via Panama: General merchandise, 45s. per ton of weight or measurement; dry goods, 70s. to 75s. per ton of weight or measurement.

Same rates are charged via Magellan.

LOUIS BLACKER, *American Consular Agent.*

PAYTA, PERU, March 22, 1905.

EXHIBIT D 7.

*Answer of American consular agency at Salaverry, Peru.*CONSULAR SERVICE UNITED STATES OF AMERICA,
Salaverry, Peru, March 11, 1905.Hon. JOSEPH L. BRISTOW,
Special Panama Railroad Commissioner,
Washington, D. C.

DEAR SIR: Replying to your favor February 18, I beg to inform you that I have made inquiries with the following results:

Salaverry receives 8 per cent of the commerce from New York via Panama, 12 per cent of the commerce from Europe via Panama, 3 per cent of the commerce from New York via Magellan, and 5 per cent of the commerce from Europe via Magellan.

Salaverry exports 13 per cent of the commerce to United States via Panama, 10 per cent of the commerce to Europe via Panama, 38 per cent of the commerce to Europe via Magellan, and 2 per cent of the commerce to United States via Magellan.

Freight rates per ton (2,240 pounds) are as follows in American gold (average):

From New York to Salaverry via Panama.....	\$15
From Salaverry to New York via Panama.....	\$30
From New York to Salaverry via Magellan.....	£3
From Salaverry to New York via Magellan.....	£4
From Europe to Salaverry via Panama.....	£3 10s.
From Salaverry to Europe via Panama.....	£5
From Europe to Salaverry via Magellan.....	£2 10s.
From Salaverry to Europe via Magellan.....	£3 10s.

There are no impediments here to prevent the successful movement of freight to and from New York and Europe by the way of Panama.

The products imported from the United States to Salaverry are kerosene, machinery, furniture, sewing machines, wheat, railway material, lumber, and general merchandise.

Products exported from Salaverry to United States are sugar, coca leaves, hides, wool, gold, and silver minerals.

The principal products in the vicinity of this port are sugar, coca leaves, hides, wool, gold, and silver minerals.

Huaraz: Being inaccessible, it is not possible for me to give you the required information.

Any other information you may require from this district, I will be pleased to give you.

I remain, dear sir, yours very truly,

A. A. SUÁREZ,
American Consular Agent.

EXHIBIT D 8.

*Answer of American Consul at Arica, Chile.*CONSULATE OF THE UNITED STATES OF AMERICA,
Arica de Chile, March 30, 1905.Hon. JOSEPH L. BRISTOW,
Special Panama Railroad Commissioner,
Washington, D. C.

SIR: In response to your letter dated at Colon, Republic of Panama, on the 18th ultimo, I have this to say:

The information which follows refers equally to Arica and Tacna. The latter is the capital and the principal commercial city of the Province of Tacna (comprising this consular district), and is situated 40 miles, by railway, from the port of Arica (the only port in the district) at the inland terminus of the Arica and Tacna Railway. The main importance of the city of Tacna lies in the fact that it is the point of transshipment (from rail to pack animals and vice versa) of cargoes going to or coming from Bolivia or interior points of the Province of Tacna. However, Tacna's importance in the particular mentioned has diminished greatly since the completion of the railway from Mollendo to Puno. The general freight tariff from Arica to Tacna (by rail) will average, approximately, \$1.15 Chilean gold (at 36½ cents American money) per 100 kilograms and from Tacna to Arica, approximately, an average of 47½ cents Chilean gold per 100 kilograms. There is no prorating tariff between the Arica and Tacna Railway Company and any of the steamship companies whose vessels call at Arica.

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For the purposes of determining the percentages of commerce traveling over the different routes inquired about and the differences of freight rates thereby, I have had recourse to inquiries at the agency of each of the steamship companies interested in that trade, to wit: The Merchants' Line and Beeche, Duval & Co., both plying between New York and Arica via Magellan Straits; The Pacific Steam Navigation Company and the South American Steamship Company, both plying between Arica and Panama, with connections thence to New York; Lamport & Holt and The Pacific Steam Navigation Company, both plying between Arica and Liverpool via Magellan Straits; and the Kosmos Line, plying between San Francisco and European ports via Arica and Magellan Straits; and from the answers I have received, I base the following:

Over 50 per cent of the commerce from the United States and from Europe to Arica travels via Magellan Straits; and less than 10 per cent travels via the Isthmus of Panama. Over 95 per cent of the commerce from Arica to Europe travels via Magellan; and less than 5 per cent travels via Panama. About 50 per cent (in value in the past year) of the commerce from Arica to the United States travels via the Isthmus of Panama, about 40 per cent via Magellan, and about 10 per cent goes to San Francisco direct.

The average (weight and measurement rates) difference in freight rates from New York to Arica, and from Arica to New York, via Magellan and via Panama, is from 30 to 40 per cent in favor of the former routing; that is, the route via Magellan is from three-tenths to two-fifths cheaper than the route via Panama.

The average (weight and measurement rates) difference in rates from Europe to Arica, and from Arica to Europe, via Magellan and via Panama, is from 50 to 60 per cent in favor of the former routing; that is, the route via Magellan is from one-half to three-fifths cheaper than the route via Panama.

The only impediments (aside from the difference in freight rates) that prevent the successful movement of freight to and from New York and Europe by way of Panama are the expenses, loss (or liability to loss), damages to goods occasioned (or liable to result), and liability to detention in transshipment on the Isthmus.

The principal products exported from this port to the United are raw cotton and goat-skins. The principal imports from the United States into this district, in the order of their importance, are kerosene, textiles, lumber (direct from the west coast of the United States), machinery, other manufactures of metals, other general merchandise.

The principal products exported from this port to Europe are copper ores, borate of lime, cotton, cotton seed, wool, hides, coffee, coca, and tin ores. The principal imports from Europe into this district are textile manufactures (of cotton, wool, and silk, including clothing of all descriptions), machinery, tools, and other hardware, industrial oils and paints, paper and its allies, furniture of all descriptions, chemical products and medicines, perfumery and soaps, wines, liquors, beer, dried and salted meats and fish, preserved fruits, explosives, arms and ammunition, and general merchandise of all descriptions.

The principal products and resources of this district are borax, sulphur, copper, salt, silver, cotton and cotton seed, olives, fruits, wines, brandy, vegetables, and a limited amount of wool and hides.

The resources of the district are not well developed, but the contrary; the highest development being in the line of agriculture, the products of which remain largely on the coast.

Be pleased to consider me at your further service for any other information I can give you.

Very respectfully yours,

JNO. W. LÜTZ.

EXHIBIT D 9.

Answer of American vice-consul at Antofagasta, Chile.

CONSULAR SERVICE, UNITED STATES AMERICA,
Antofagasta, Chile, April 24, 1905.

Mr. J. L. BRISTOW,

Special Panama Railroad Commissioner, Washington, D. C.

DEAR SIR: As requested in your favor of February 18, I beg to reply to your questions as follows:

No. 1. About 5 to 10 per cent of the commerce from the United States to Antofagasta is transported by way of Panama, and 85 to 90 per cent by way of Magellan. There is practically no movement to and from Europe via Panama. About 2 to 4 per cent of commerce from Antofagasta to the United States is transported by way of Panama, and 90 to 95 per cent via Magellan. You must understand that no exact statistics are available here, and that the above figures are the consensus of opinion of the leading shipping agencies.

No. 2. Freight rates via Panama to and from New York are 20 to 50 per cent higher than via Magellan. It is, however, difficult to obtain an exact comparison between the two routes, there seeming to be little attempt at competition, and the port on moving via Panama seeming to be principally small shipments in a hurry. I understand that in years past the shipments via Panama were larger than at present, but that the business methods and rise in rates of the Panama Railroad Company discouraged them. Likewise the West Coast and Merchants' lines fetch and take merchandise under better conditions than are possible via Panama, they using the Magellan route.

No. 3. The agent here possessed no schedule of rates to and from Europe via Panama. He, however, stated that if anyone insisted on having goods sent by said route that it would cost about twice as much as via Magellan.

In all the above cases the outward and homeward rates are practically the same.

No. 4. The principal impediments at present are the difference in freight rates and the extra handling required on the Isthmus, with the resultant damage and loss of goods.

No. 5. The exports are the mineral products of the Province, as copper ores, nitrate of soda, iodine; and the products of Bolivia, as borate of lime, silver ores, tin, and animal products, as hides, hair and wool; also, zinc ore, bismuth, rubber, quinine and copper ore.

The imports are general supplies for man, beast, and industry. The Province is a desert and produces only minerals, which are exported. It therefore imports all and everything for wear and consumption from the coast and foreign parts, including coal which comes entirely from foreign parts.

No. 6. Same as above. You are referred for more particulars and details to the "Estadística Comercial de Chile" for 1903, said volume having recently been sent to the Department of Commerce at Washington.

No. 7. See exports under No. 5. I should say that the borate of lime comes principally from the Chilean side of the boundary line with Bolivia and that this latter country does the bulk of its importing and exporting through the port of Antofagasta. Mollendo and Arica are also forwarding ports for Bolivia, but of considerably less importance.

No. 8. The mineral resources of the Province are fairly developed, but those of Bolivia but partially so. The extension of many railroads in course of construction and projected will materially increase development. The nitrate industry has increased enormously during the last year.

The information above applies also to Taltal and Tocopilla, they, however, have no Bolivian connections and therefore produce only nitrate of soda, copper ores, and iodine. Cobija and El Cobre are unimportant.

I am, dear sir, your obedient servant,

FRANK D. ALLER, *Vice-Consul*.

EXHIBIT D 10.

Answer of American consul at Iquique, Chile.

AMERICAN CONSULAR SERVICE,
Iquique, Chile, April 7, 1905.

Hon. J. L. BRISTOW,

Special Panama Railroad Commissioner, Washington, D. C.

MY DEAR SIR: Referring to my letter of March 20, I now have the pleasure to forward herewith the report called for in your letter of February 18, relative to commerce at this port:

1. There is no way of ascertaining what per cent of the commerce from the United States or Europe to Iquique, and from Iquique to Europe, is transported by way of Panama or Iquique. It is estimated that possibly 5 per cent of the commerce from the United States comes via Panama, and 2 or 3 per cent from Europe by the same route. Probably not over 1 per cent goes via Panama from this district to either the United States or Europe.

2 and 3. Freight rates from Iquique to the United States or Europe vary from \$5 to \$25 per ton, via Magellan. Iodine is about the only thing shipped from here via Panama either to the United States or Europe. Rate, \$25 per ton. The rate is the same via Magellan to the United States and \$20 per ton to Europe.

I am unable to get freight rates from New York or Europe via either route.

4. There is one impediment that prevents the successful movement of freight to and from New York and Europe by way of Panama—i. e., the Isthmus of Panama. Without a doubt the per cent of freight going to and from the United States and Europe and this port and Pisagua by way of Panama and Magellan, will be reversed when we get the Panama Canal finished and in working order.

At present only such goods which are needed quickly come or go by way of Panama. The principal article of commerce shipped from this district is nitrate of soda, which is

shipped in cargo lots at about \$5 per ton and, of course, goes via Magellan. The transshipping of freight at Panama causes too much expense and breakage, and often loss of contents of boxes.

5. The principal exports from this port are nitrate of soda and iodine.

The imports consist of nearly everything useful to man and beast. This is an absolute desert. Everything that comes under the following heads are imported here, such as preserved foods, flour, lumber, hardware, furniture, tobacco, cotton, linen, and silk goods, watches and jewelry, oils of all kinds, paints and varnishes, paper of all kinds, perfumeries and chemicals and chemical products, machinery and tools, railroad supplies, iron and steel, arms and ammunition and explosives. Agricultural implements are of no use here.

6. Same as No. 5.

7. The principal products and resources here are nitrate of soda, iodine, copper, and silver.

8. The manufacture of nitrate of soda and iodine is well developed. The mining of copper and silver is not very well developed.

9. What is true of Iquique is also true of Pisagua.

I have the honor to be, sir, your obedient servant.

CHARLES S. WINANS, *American Consul.*

EXHIBIT D 11.

Answer of American consul at Valparaiso, Chile.

AMERICAN CONSULATE,
Valparaiso, Chile, March 31, 1905.

Hon. JOSEPH L. BRISTOW,

Special Panama Railroad Commissioner, Washington, D. C.

SIR: Replying to your letter of inquiry dated Colon, Isthmus of Panama, February 18, 1905, I have the honor to report as follows:

A very small percentage of the commerce from the United States and Europe to Valparaiso, and from Valparaiso to the United States and Europe is transported by Panama. The bulk of imports and exports is conveyed by steamers via Magellan and sailers round Cape Horn. It is only when certain goods not of a bulky nature are urgently wanted, that they are sent via Panama.

The freight rates vary a good deal, but freighting by way of Panama as compared with the Magellan route is about 50 per cent dearer. The above percentage applies also in comparing the Panama and Magellan routes for the European trade.

The greatest impediment in the way of the successful movement of freight to and from New York and Europe by way of Panama consists in the landing of goods at Colon and Panama for conveyance across the Isthmus and the consequent damage incident to disembarking and reshipping at those ports. A second impediment is the loss of time often resulting in failure to make the connection between two lines of steamers at the Isthmus.

The principal products imported and exported at this port to and from the United States are the following:

Exports: Nitrate, copper, wool, quillay, bark, algarrobilla, walnuts.

Imports: Machinery, railway supplies, petroleum, lumber, and manufactured goods in general.

The principal products exported and imported at this port to and from Europe are the following:

Exports: Wheat, barley, copper, wool, nitrate.

Imports: Coal, machinery, iron, manufactured goods in general.

The principal products and resources of the country in the vicinity of this port are wheat, barley, and copper.

Illapel is the center of an agricultural and mining district about 100 miles north of Valparaiso, and trades through the port of Coquimbo.

Quillota is the center of a small agricultural district about 30 miles east of Valparaiso; its trade is local.

The opening of the Panama Canal, providing better and cheaper transportation facilities between the United States and the west coast of South America, will encourage the development of some of the greatest wealth-producing resources of Chile, which are now latent. Such are timber, low-grade ores, wool.

Timber.—There are in the south of Chile vast tracts of virgin forest, the only cleared spaces in which are those from which the timber has been burned in order to till the soil. Improved transportation facilities and low freight rates are necessary to the development of the timber industry. In these forests are found various grades of wood of excellent quality and in practically unlimited quantities, some of which compare with American cypress,

oak, cedar, and redwood. A few sawmills have been established in the forest region, but they have made little impression upon the timber resources. The forests of Chile, like those of North America in the pioneer days, are suffering from wanton destruction by those who covet the products of the fertile soil. The timber interests of Chile undoubtedly furnish a promising field for investment, and the opening of the Panama Canal will do much to encourage the development of this branch of industry.

The woods chiefly found are cypress, roble, laurel, lingue, and rauli.

Lower grade ores.—Ever since copper mines began to be worked in Chile miners have confined their attention simply to high-grade ores, rejecting all that did not come under that category. Up to the present time the majority of mines are worked in a primitive and, as it were, retail fashion. The result is that there now remain great quantities of lower grade ore which in the opinion of experienced miners and engineers would prove a paying business if worked on a broader basis—that is, with smelting works and all appurtenances.

The trial has already been made by some national and foreign syndicates with excellent results. It is no exaggeration to say that there are to-day in Chile hills which only require to be cut up and melted down into copper.

Lower sea freights would result in encouraging the development of this great natural resource of the country, and the Panama Canal would seem to offer the means for cheaper transportation rates for that class of freight.

Wool.—The extreme south of Chile (Magellan) is exceptionally adapted to sheep raising, and for a number of years farmers have been building up an export trade which has provided many of them with handsome fortunes. During the past year a remarkable movement has taken place in Valparaiso and Santiago in the direction of promoting the sheep-farming industry by the formation of powerful companies.

While this particular branch of business has been overdone during the past year, on account of the tremendous profits it promised on investment, it is the opinion of experienced farmers and financiers that the sheep-farming interests of southern Chile have a most promising future. It offers a good field for investments and for capable, industrious workers in that line. The opening of the canal will have a good effect upon that branch of Chilean trade.

In addition to increasing trade between the United States and Chile, by the development of latent resources in this country, the opening of the Panama Canal will, in the opinion of well-informed importers, exporters, and commercial men in Valparaiso, have a great influence upon the foreign trade of all the Pacific coast countries in South America. The reasons assigned for this are, the opening of a much shorter and more direct water transportation route between west coast ports and the United States, and cheaper traffic rates both to North America and Europe. The great nitrate fields and guano deposits of northern Chile will be brought several thousand miles nearer the United States markets by way of the canal than via the Straits of Magellan, by which route the products of that region are now transported, much of the nitrate going to Europe, from where it is transhipped to America. The same conditions apply to the products of copper mines, and various other ores, large deposits of which are found in northern Chile.

The opening of the Isthmian Canal will give to exporters from the United States to the markets of Chile an advantage rather than handicap them in the matter of transportation rates, as is the case under existing conditions. This will encourage the importation into Chile of many articles of American manufacture which are now made almost prohibitory by excessive freight rates.

There are now two lines of steamers running regularly between New York and west coast ports via Magellan, going as far north as Guayaquil, Ecuador. The distance for those steamers would be reduced more than half via Panama, as they do not stop at Atlantic coast ports.

Your obedient servant,

R. E. MANSFIELD, *Consul.*

EXHIBIT D 12.

Answer of American consular agent at Caldera, Chile.

AMERICAN CONSULAR AGENCY,
Caldera, Chile, March 22, 1905.

HON. JOSEPH L. BRISTOW,
Special Panama Railroad Commissioner, Washington, D. C.

DEAR SIR: I have the pleasure to acknowledge receipt of your letter dated Isthmus of Panama, February 18, and taking note of the matter pertaining to the inquiries you make, beg to reply as follows:

1. The transport of commerce is, I judge, 95 per cent to or from Europe and 5 per cent to or from New York, via either route.

2. The rate of freight to New York via Panama is £6 5s. per ton. By the way of Magellan freights are arranged in Valparaiso. Freights out are not quoted.

3. The rate of freights to Europe via Magellan is 45s.; out 40s. By the way of Panama freights are not quoted.

4. Higher rate of freights and fee of damage to cargo are, I judge, the reasons there is not more movement via Panama.

5. Imports from the United States consist mainly of machinery, lubricating oils and paraffin.

6. Imports from Europe consist of machinery, lubricating oils, linseed oils, paints, metal bags, mining steel, iron, iron rails, coal, coke, cotton cloth, clothing, sugar, rice, and tea. Exports to Europe are copper ores, bar copper, small quantities of gold and silver in bars, and a very limited quantity of dried fruits.

7. The principal product of this Province, Atacama, is copper. Gold and silver mines are worked in a small way. Companies are being formed to work borax deposits, which bid fair to be of importance. Mining, principally copper, is the industry of the province, with a limited agriculture that depends upon supplies of water coming down the valleys of Copiapo and Huasco.

This industry, mining, which is being developed more and more daily, is greatly facilitated by the railways which run inland from Chañaral, Carizal, Huasco, and this port, at each of which ports there is a railway machine shop and copper-smelting establishments. Particularly at this port the machine shop is extensive, and turns out all kinds of mining machinery and other requirements. Caldera, of the four ports, is the only "port of entry"—puerto mayor—but at each port wharfage and shipping facilities are good. Unloading and loading of vessels is done in launches, a usually smooth sea facilitating same. Public roads are fairly good, while Government engineers at present are surveying for new and repairing the old ones.

8. Please find the purport of this inquiry with your request regarding the other three ports, embodied in the above answers and statements, which I may add hold good for the entire Province.

Trusting this report will meet your purpose, I remain at your service,

Yours, very respectfully,

JOHN C. MORONG,
American Consular Agent.

EXHIBIT D 13.

Answer of American consular agent at Coquimbo, Chile.

AMERICAN CONSULAR AGENCY *Coquimbo, Chile, April 28, 1905.*

MY DEAR SIR: Since the receipt of your letter of February 18, I have been trying to find the information asked for, but owing to the custom-house statistics being kept in the head office at Valparaiso, I regret that I can not give same as detailed as I could have wished. The consul there, no doubt, will supply some of the points wanting in this.

1. Imports and exports to and from the States, together with other foreign countries, are all grouped under one heading in the customs here "foreign." It would be a long and tedious work, and, I fear, far from accurate, to try and separate the different items. This is done in Valparaiso.

From the archives of this office I can furnish the following reexports to the United States for the last two years (values in United States gold):

Chinchilla skins by Panama:	
1903, 10,008 $\frac{1}{2}$ dozen.....	\$157,483.94
1904, 10,776 $\frac{1}{2}$ dozen.....	193,598.14
Copper bars by Panama:	
1903, 635,000 kilograms.....	151,058.46
1904, 1,908,410 kilograms.....	492,342.09
Copper bars by Magellan:	
1903, 1,016,000 kilograms.....	250,246.54
1904, 736,600 kilograms.....	131,809.10
Dry salted goatskins by Magellan:	
1903, 107,594 kilograms.....	48,949.10
1904, 38,189 kilograms.....	10,283.65
Dry salted goatskins by Panama:	
1904, 1,940 kilograms.....	465.30

Magnese ores:

1903, 5,590,830 kilograms..... \$40,764. 89

Walnuts by Panama:

1903, 56,313 kilograms, sacks..... 5,808. 50

Walnuts by Magellan:

1903, 48,825 kilograms..... 5,036. 40

1904, 104,818 kilograms..... 9,363. 40

Algarrobilla:

1904, 108,863 kilograms..... 4,543. 40

Gold, silver, and copper ores:

1904, 127,995 kilograms..... 5,375. 30

2. Freights vary, and are generally arranged by the head offices at Valparaiso. In goatskins, for instance, according to the printed list supplied to the agencies here, by Panama is \$30 United States gold against 45s. to 60s. by Magellan Strait. Chinchilla skins go as treasure and pay 1½ per cent on value either way.

3. The difference in freight rates from Europe to Coquimbo must be prohibitive, as to my knowledge no goods come by that route.

4. The main cause that prevents greater movement must be the difference in freight.

5. Exports to the United States: Manganese, goatskins, chinchilla skins, wool, algarrobilla, walnuts, bar copper.

Imports from the United States: Canned goods, perfumery, tobaccos, paints, oils, musical instruments, paraffin, lubricating oils, pine grease, agricultural and mining machinery, oak staves for barrels, Oregon pine, hardware, safes, and general merchandise.

6. Imports from Europe: Fire bricks, coal, coke, pig iron, groceries, machinery, wines and spirits, earthenware, porcelain ware, wrapping and other papers, empty bottles, corks, capsules, etc., plain glass, bar iron, galvanized sheets, corrugated iron, mining steel, rails, dry goods of all kinds, hardware, drugs, stationery, perfumery and fancy soaps, cutlery, glassware, musical instruments, candles, matches, teas, tobaccos, paints, and oils.

Exports to Europe: Copper in bars, copper, silver, manganese and cobalt ores, goat and kid skins, neat hides, honey, wax, barley for brewing and fodder, chopped and compressed alfalfa, wool, algarrobilla, chinchilla skins, quillai bark.

The products of the province and in the vicinity of this port are varied and abundant. Principally for the supply of the northern provinces potatoes and all kinds of vegetables and fruit are grown in great abundance; also wheat, barley, maize, beans, alfalfa, etc.

A class of grape for raisins is greatly cultivated, and spirit (pisco) is made from special classes of grapes. Both have an extensive and increasing sale, with some demand for the neighboring Republics. Sun-dried peaches, figs, etc., are sent from here to the northern and southern provinces.

Cattle, sheep, horses, mules, and donkeys are bred and sent north in considerable quantities. The mules, horses, and donkeys are not very large, but hardy and do good work on scanty food.

In minerals, copper, iron, and manganese ores are in great abundance. Silver and gold are also worked, together with cobalt, sulphur, etc. There are no coal mines in the province.

Numerous streams run from the Cordilleras to the sea, which supply the country with irrigation and might be used for producing power for electricity and other purposes. The river Coquimbo close to here has an approximate gradient of 1½ per cent, with a calculated 2,000 liters water per minute in dry years. The valleys down which the rivers run are mostly narrow, and the hills rise suddenly on both sides.

The resources of the country are practically undeveloped.

Very respectfully,

ANDREW KERR,
American Consular Agent.

Hon. J. L. BRISTOW,

Special Panama Railroad Commissioner, Washington, D. C.

LIST OF QUESTIONS SENT TO AMERICAN CONSULS AND CONSULAR AGENTS IN CENTRAL AMERICA AND MEXICO.

COLON, ISTHMUS OF PANAMA, February 15, 1905.

MY DEAR SIR: As indicated in a letter from the Secretary of State, which you doubtless have received, I beg to make the following inquiries, and ask that you forward your reply to me at Washington:

What are the shipping facilities of Punta Arenas by sea—that is, how many steamship lines make regular calls at that port, and how many make irregular calls there during the year?

What is the nationality of each of the steamship lines, and how often do they make regular calls?

How many go north, and how many south?

Is Punta Arenas the seaport for any important interior town?

What are the wharfage facilities, and who own the wharves?

Are the wharves free to all vessels; if not, what are the rates charged for wharfage privileges, and are the rates the same to all ships?

What are the principal products exported and imported?

What are the principal products and resources of the country in the vicinity of this port?

Are the resources well developed, or are they in a state of development?

What products are exported and imported between the United States and this port, and what course does this commerce take, via San Francisco or via Panama?

Are there any impediments in the way of shipments of either American or European commerce via Panama; if so, what are they?

An early and full reply, as quickly as is convenient to you, would be greatly appreciated.

Very respectfully,

(Signed) J. L. BRISTOW,
Special Panama Railroad Commissioner.

This letter sent to following also:

Charles Holmann, consular agent, San Juan del Sur, Nicaragua.

Henry Palazzo, consular agent, Corinto, Nicaragua.

William Heyden, consular agent, Amapala, Honduras.

John Jenkins, consul-general, San Salvador, Salvador (as to El Triunfo).

Samuel F. Lord, consular agent, La Union, Salvador.

Henry Hussey, consular agent, La Libertad, Salvador.

Frank Wager, consular agent, Acajutla, Salvador.

Frank Sims Swan, consular agent, San Jose de Guatemala, Guatemala.

Hon. Leon A. Marquez, American consular agent, Punta Arenas, Costa Rica.

Carl G. Heitman, consular agent, Champerico, Guatemala.

Samuel Walford, consular agent, Ocos, Guatemala.

George W. Dickinson, consul, Acapulco, Mexico.

R. Van McKie, commercial agent, Manzanillo, Mexico.

EXHIBIT D 14.

Answer of the American consular agent at San Juan del Sur, Nicaragua.

AMERICAN CONSULAR SERVICE.

San Juan del Sur, Nicaragua, March 17, 1905.

J. L. BRISTOW, Esq.,

Special Panama Railroad Commissioner, Washington.

DEAR SIR: Your esteemed favor dated Colon, the 16th of February, was received by last mail, and now I have the honor to answer same.

1. The only steamship line that makes regular calls at this port is the Pacific Mail Steamship Company, and about three times a year the Kosmos Line, a German company, calls here when there is cargo for them to leave or to take.

2. The Pacific Mail Steamship Company is American, and the Kosmos Line German, as I said before.

3. Two of the Pacific Mail Steamship Company's steamers call going north and two south each month.

4. San Juan del Sur is the seaport for the town of Rivas, capital of the department of the same name, but also part of the imports and exports of the town of Granada are made through this port.

5. There is only an old wharf, and owned by the Government, to which goods are brought in lighters from the steamers and shipped the same way. The Government has contracted the building of a new wharf with private parties.

6. The steamers anchor about 500 yards from the wharf. There are no wharfage charges whatever for steamers, but owners of goods shipped or received have to pay \$2, Nicaraguan currency, per ton of weight or measurement. (Actual value of Nicaraguan currency, \$6.45 for \$1 gold.)

7. Almost everything needed is imported in Nicaragua, there being no factories to speak of. The exports from this port are: Dye and hard woods, as fustic, cedar, mahogany, etc., hides, india rubber, deerskins, indigo, coffee, and cotton. This last for the first time this year.

8. Very little is produced in the vicinity of this port. Cotton and indigo are planted on a small scale. There are some coffee and cocoa plantations in this district, but the cocoa is not exported, all being consumed in the country.

9. The resources are, in my opinion, in a state of development.

10. With very little exceptions, all the exports from this port go to New York via Panama. Imports from San Francisco are principally flour, wine, fruit, and provisions of every kind. From New York: Barbed wire, all kinds of hardware, petroleum, dry goods, drugs, etc. All goods from New York come via Panama Railroad Company and Pacific Mail Steamship Company; from San Francisco direct by the same steamship line.

11. There are no impediments whatever in the way of shipments of either American or European commerce.

As stated before (this), your letter arrived by last mail. This explains the delay. Any other information you may need will be promptly, and to the best of my knowledge, given.

Awaiting your commands, I am, dear sir, your obedient servant,

CHARLES HOLMANN,
American Consular Agent.

EXHIBIT D 15.

Answer of American consular agent at Corinto, Nicaragua.

CORINTO, NICARAGUA, March 19, 1905.

J. L. BRISTOW, Esq.,

Special Panama Railroad Commissioner, Washington.

DEAR SIR: Your favor of February 16 duly received, and am glad to reply to your questions:

Two regular steamship lines call at Corinto, the Pacific Mail and the Kosmos Line, the former an American and the latter a German line.

The Pacific Mail calls six times a month and the Kosmos two. The half of each line go north and the half south.

Corinto is the seaport of all Nicaragua.

No wharf so far.

Principal export is coffee.

Principal imports are general merchandise.

Principal product of the country in the vicinity is sugar.

The resources have to be developed.

Products to the United States: Rubber, hides, skins, and some coffee—to New York principally.

Imports: Kerosene, wire from New York; flour, canned goods, and wines from San Francisco.

Cargo to and from New York goes via Panama.

No impediments via Panama.

Yours, very truly,

HENRY PALAZIO,
American Consular Agent.

EXHIBIT D 16.

Answer of American consular agent at Amapala, Honduras.

CONSULAR SERVICE, UNITED STATES,
Amapala, Honduras, March 20, 1905.

DEAR SIR: I have been favored by your esteemed letter of February 16, which I have the honor to reply.

The only steamship line that makes regular calls at this port is the Pacific Mail Steamship Company, of American nationality. The Kosmos Line, German nationality, makes irregular calls. No other steamship lines call at Amapala. The Pacific Mail steamers call twice a month going north and twice a month going south. About the same number of steamers sends the Kosmos Line, but without itinerary.

Amapala is the only seaport for the Pacific coast of Honduras, and the most important towns in the interior receiving their goods through this port are Tegucigalpa, the capital of Honduras, Comayagua, Yuscarán, Choluteca, Pespere.

There are no wharves in Amapala. The shipping is made by launches belonging to two commission houses at the rate of \$4 silver (\$1.75 gold) per ton.

The principal products exported are raw gold and silver, concentrates, hides, and some coffee. The principal imported goods are mining machinery and supplies, dry goods, kerosene, wines and spirits, and flour.

The principal resources of the country in the vicinity of this port are the mining industry and a few coffee plantations. Both are in a state of development.

The products imported from the United States via Panama are chiefly machinery and mining supplies, cotton goods, kerosene, barbed wire, drugs, and, from San Francisco, flour, canned goods, wines. The exportations from here to the United States via Panama consist chiefly in raw gold and silver, concentrates, hides, india rubber; to San Francisco, nearly only concentrates.

The impediments in the way of shipments of either American or European commerce via Panama consist in the high rate of freights and the bad handling of the merchandise in the transshipment at the Isthmus.

Very respectfully,

W. HEYDEN,
American Consular Agent.

Hon. JOSEPH L. BRISTOW,
*Special Panama Railroad Commissioner,
War Department, Washington.*

EXHIBIT D 17.

Answer of American consular agent at La Libertad, Salvador.

CONSULAR SERVICE, UNITED STATES,
La Libertad, Salvador, March 16, 1905.

Hon. JOSEPH L. BRISTOW,
*Special Panama Railroad Commissioner,
War Department, Washington.*

DEAR SIR: The following answers are in reply to your letter dated Colon, February 16, 1905:

At this port there is one regular steamship line, viz.: The Pacific Mail Steamship Line, of San Francisco (American). The Kosmos Line, of Hamburg (German), makes irregular calls.

The Pacific Mail boats touch here six times a month, three up and three down; German line, about one steamer each way per month, except during the coffee crop, when they call oftener, from January to April, inclusive.

La Libertad is the seaport for San Salvador, Santa Tecla, and San Vicente. Merchandise is hauled by road in ox carts.

There is one iron pier, owned by "La Compañia del Muelle de La Libertad, San Salvador." All merchandise is lightered and towed between ship and pier by a steam tug. Vessels anchor in open roadstead three-fourths of a mile from pier, in about 10 fathoms of water.

I inclose wharf charges, and also tariff list of the Agencia Salvadoreña, for embarking and disembarking merchandise.^a

Exports: Coffee, balsam, hides, indigo, sugar, and rubber.

Imports: All kinds.

Principal products same as exports.

Coffee, hides, indigo, sugar, are well developed. Rubber is in a state of development and reported to be of good quality. Coffee is exported to both San Francisco and New York. Hides, balsam, indigo, and rubber all go to New York; sugar to San Francisco.

There are no impediments in the way of shipments via Panama.

I have the honor to be, sir, your obedient servant,

H. HUSSEY,
American Consular Agent.

EXHIBIT D 18.

Answer of American consular agent at Ocos, Guatemala.

Hon. J. L. BRISTOW,
*Special Panama Railroad Commissioner,
War Department, Washington.*

OCOS, GUATEMALA.

In reply to your letter of February 16, 1905, will state the shipping facilities at Ocos are by lighters through the surf since the piers were destroyed by the earthquake and eruptions. Kosmos (German) Steamship Line makes irregular calls at Ocos. Pacific Mail irregular—only one steamer in about one year or more.

^a Not received.

Ocos is the outlet for the San Marcos coffee district, and an important port. No wharf. The charges are as follows: For all vessels receiving and dispatching, \$96 currency; permit to load, \$2; to unload, \$2; shipping list for custom-house, 25 cents; clearance, \$2; boat hire, \$10, or \$114.25 bills for all.

The principal products exported are coffee, hides, rubber, and some timber. They are in a state of development.

All kinds of products, both from United States and from Europe, by the way of San Francisco and Panama.

Since June 15, last year, there have been nine German steamers from this port going north, thirteen German steamers going south from this port, and only one American steamer; but that is no criterion to go by, because nearly all of the coffee crop of last year was shipped by the way of Champerico, this company being unable to give quick dispatch.

The piers were owned by a German company called Ferrie Carril de Ocos and Company de Agency Anonemo.

I know of no impediment either of European or American commerce by the way of Panama.

Yours, respectfully,

SAMUEL WALFORD,
American Consular Agent.

EXHIBIT D 19.

Answer of American consular agent at Champerico, Guatemala.

AMERICAN CONSULAR AGENCY,
Port of Champerico, Guatemala, April 3, 1905.

Hon. J. L. BRISTOW,
Special Panama Railroad Commissioner, Washington, D. C.

SIR: In compliance with your request dated February 16, which I beg to acknowledge receipt of, I am only answering now owing to the fact that I have been compiling statistics in reference to the matter, forwarding the same under separate cover.

The shipping facilities of Champerico by sea at present are by two steamship lines, one making regular calls and one irregular.

The line making regular calls is the Pacific Mail Steamship Company, an American line, and the other, making irregular calls, is the Kosmos Line, of Hamburg, Germany.

During the last fiscal year the Pacific Mail Steamship Company made 93 calls at this port, half for the north and half for the south. The steamers of the Kosmos Line made 38 calls during the year also, 17 for the United States and 21 for Europe.

Champerico is the seaport for Quezaltenango, the second largest city in the Republic, San Felipe, Mazatenango, and Retalhuleu, all of which do a large business in imports and exports to supply the plantations. There is also a considerable amount of cargo handled at this port that formerly used to go by the way of Ocos, owing to the fact that no American steamers call at Ocos and the difficult facilities for handling cargo at that port.

The wharfage facilities at this port are good—that is, for an open roadstead—having a long iron pier and appliances sufficient to handle 500 tons a day of ordinary cargo, if necessary and circumstances allow, as well as a 20-ton crane for heavy weights. All shipments are made to and from the pier by lighters.

The wharf charges are the same on all cargo handled, regardless of the steamship line carrying it, and by law no distinction can be made for or against any company.

The principal exports are coffee, rubber, hides, and skins, and imports of general merchandise, which principally comes from Europe.

The plantations in this district were somewhat damaged by the eruption of the volcano Santa Maria, October 23, 1902, but at the present time are better developed than before, and the crop of coffee has been at least 25 per cent more than for the past five years this season.

The principal products exported to the United States are coffee, hides, and rubber for New York, which are shipped via Panama, and coffee for San Francisco direct, but most all other merchandise go to Europe. Flour, corn, lumber, and provisions are imported from San Francisco direct; other merchandise via Panama from New York. No cargo is shipped to this port from New York or other eastern States by way of San Francisco.

The most important drawback to shipments from here to the United States and Europe via Panama has been the exclusive through billing in connection with Atlantic lines by the Pacific Mail and Panama Railroad Company and lack of sufficient tonnage by the same line, thereby allowing the Kosmos Line to get part control of coffee shipments to Europe via the Straits of Magellan. Any amount of coffee has been shipped by the German line that had been ordered shipped via Panama, owing to the lack of space, and in some instances animosity toward the Pacific Mail line. This year the Pacific Mail has given this port

more space, improving a little on former years; but even allowing this, one of the German steamers alone took 20,000 bags from here which would have gone via Panama had they had sufficient tonnage.

Trusting the information and statistics will meet with your approval, I remain, sir,

Your obedient servant,

CARL G. HEITMAN,
American Consular Agent.

AMERICAN CONSULAR AGENCY,
Port of Champerico, Guatemala, April 15, 1905.

Hon. J. L. BRISTOW,
Special Panama Railroad Commissioner, Washington, D. C.

SIR: In conformity with my letter of April 3, 1905, I take pleasure in forwarding the statistics referred to, which show the exports from this port from July, 1902, to March 31, 1905, and in addition may say that this season's crop will reach 300,000 bags, if not more.

Your obedient servant,

CARL G. HEITMAN,
American Consular Agent.

JULY 1, 1904, TO MARCH 31, 1905.

Month.	Clean coffee.		Shell coffee.		Skins.	
	Bags.	Pounds.	Bags.	Pounds.	Packages.	Pounds.
1904.						
July.....	5,838	832,009	3,187	423,523	11	3,156
August.....	5,027	712,767	4,561	600,825	5	90
September.....	820	114,848	118	14,830		
October.....	2,533	347,704	1,478	193,829	2	30
November.....	3,531	487,670	4,059	540,901	4	1,176
December.....	7,241	988,357	9,320	1,235,956	1	140
1905.						
January.....	9,907	1,391,451	19,457	2,544,096		
February.....	14,729	2,084,247	14,251	1,879,999		
March.....	25,921	3,633,119	20,007	2,630,570	4	1,008
Total.....	75,547	10,593,073	76,438	10,063,530	27	7,430

Month.	Rubber.		Dry hides.		Sugar.		Miscellaneous.	
	Bales.	Pounds.	Num-ber.	Pounds.	Bags.	Pounds.	Pack-ages.	Pounds.
1904.								
July.....	99	15,511	2,304	41,472				
August.....	44	7,228	783	14,809			1	118
September.....	22	4,432	405	7,560			343	61,261
October.....	24	3,839	624	11,232			3	615
November.....	11	1,960	600	10,800			566	71,173
December.....	40	7,443	511	9,442				
1905.								
January.....							28	11,627
February.....	53	10,102			3	306	46	3,858
March.....	13	2,782	840	12,264			23	2,485
Total.....	306	53,296	6,077	107,639	3	306	987	151,137

RECAPITULATION.

Pacific and Atlantic lines.	Packages.	Pounds.	Tons.
Hamburg-American Line.....	67,270	9,056,339	4,528 ⁵ / ₁₆
Royal Mail Steam Packet.....	25,010	3,236,945	1,618 ¹ / ₂
Panama Railroad Steamship Line, New York.....	11,518	1,049,736	254 ¹ / ₂
Pacific Mail Steamship Company, San Francisco.....	29,764	4,163,323	2,081 ¹ / ₂
Kosmos Line.....	24,984	3,346,073	1,673 ¹ / ₂
Harrison & Leyland Line.....	273	37,401	18 ¹ / ₂
Cia Tras de Barcelona.....	155	22,840	11 ¹ / ₂
Cia Gen. Tras.....	424	64,753	32 ¹ / ₂
Total.....	159,398	20,977,412	10,488 ¹ / ₂

EXPORTS.

July 1, 1902, to June 30, 1903.

Clean coffee:	
Bags.....	110,269
Pounds.....	15,753,518½
Shell coffee:	
Bags.....	52,890
Pounds.....	6,895,583½
Skins:	
Packages.....	134
Pounds.....	25,409½
Rubber:	
Bales.....	606
Pounds.....	103,818
Dry hides:	
Number.....	20,223
Pounds.....	366,657
Sugar:	
Bags.....	999
Pounds.....	101,800
Miscellaneous:	
Packages.....	3,858
Pounds.....	639,049
Cacao:	
Packages.....	39
Pounds.....	5,148

July 1, 1903, to June 30, 1904.

Clean coffee:	
Bags.....	110,338
Pounds.....	16,164,844
Shell coffee:	
Bags.....	71,810
Pounds.....	954,132½
Skins:	
Packages.....	228
Pounds.....	33,871
Rubber:	
Bales.....	604
Pounds.....	102,111
Dry hides:	
Number.....	15,973
Pounds.....	291,956
Sugar:	
Bags.....	1,420
Pounds.....	218,960
Miscellaneous:	
Packages.....	908
Pounds.....	189,815½
Cacao:	
Packages.....	
Pounds.....	

RESUMEN.

July 1, 1902, to June 30, 1903.

Lines.	Packages.	Pounds.	Tons.
Pacific Mail Steamship Company.....	48,484	6,841,370	3,420½
Panama Railroad Steamship Line.....	33,236	2,540,704½	1,270½
Royal Mail Steam Packet Company.....	14,592	1,964,626½	982½
Hamburg-American Line.....	40,424	5,400,807½	2,700½
Kosmos Line.....	45,935	6,237,950	3,118½
Cia. Tras. de Barcelona.....	209	29,348	14½
Cia. Gen. Tras.....	4,547	649,493	324½
P. S. H. Co. and C. S. A. V.....	1,591	226,793	113½
Total.....	189,018	23,890,983½	11,945½

July 1, 1903, to June 30, 1904.

Pacific Mail Steamship Company.....	43,619	6,575,335½	3,287½
Panama Railroad Steamship Line.....	25,530	2,028,681½	1,014½
Royal Mail Steam Packet Company.....	15,155	2,105,268	1,052½
Hamburg-American Line.....	75,168	10,178,755	5,089½
Kosmos Line.....	40,885	5,523,891	2,761½
Cia. Tras. de Barcelona.....	380	55,380	27½
Cia. Gen. Tras.....	243	33,047½	16½
Austrian A. M. Line.....	136	20,740	10½
Harrison & Leyland Line.....	165	21,780	11½
Total.....	201,281	26,542,879	13,272½

CARL G. HEITMAN,
American Consular Agent, Champerico, Guatemala.

EXHIBIT D 20.

Answer of American consul at Acapulco, Mexico.

CONSULATE OF THE UNITED STATES,
Acapulco, Mexico, April 8, 1905.

Hon. JOSEPH L. BRISTOW,
Special Panama Railroad Commissioner, Washington, D. C.

SIR: Referring to your communication of February 16, 1905, I would most respectfully report as follows:

1. There are two steamship lines making regular calls at this port, and one making irregular calls.
2. The nationality of those making regular calls are American and Mexican, and the one making irregular calls German.
3. The number going each way of American is one each week. Mexican, one each way every twenty days. The German line calls whenever it has freight to deliver or receive.
4. Acapulco is not a seaport for any important interior town.
5. There are no wharfage facilities in Acapulco.
6. The principal products exported are dry hides, skins, cotton, limes, pines, and other tropical fruits.
7. The resources in vicinity of Acapulco are undeveloped.
8. The exports, such as skins, limes, and other tropical fruits, go to San Francisco; dry hides, mostly to New York. The imports are principally general merchandise, and come either way. At present quite a quantity of machinery is imported, mostly from San Francisco, or from that way.
9. The only impediment in the way of shipment of either American or European commerce via Panama is the exclusive use of the Panama Railroad.

About the conditions prevailing in Port Angel, Salina Cruz, and Tonala. San Benito is the port of Tapachula, a town of considerable importance, as the surrounding country is somewhat developed, producing considerable coffee, and is expected to produce considerable rubber, although at present a speculation.

I am, sir, yours, most respectfully,

GEORGE W. DICKINSON,
American Consul.

EXHIBIT D 21.

LIST OF QUESTIONS SUBMITTED TO THE AMERICAN CONSUL AT MAZATLAN, MEXICO, AND HIS ANSWERS THERETO.

COLON, ISTHMUS OF PANAMA, February 15, 1905.

MY DEAR SIR: As indicated in a letter from the Secretary of State, which you doubtless have received, I beg to make the following inquiries, and ask that you forward your reply to me at Washington:

What are the shipping facilities of Mazatlan by sea—that is, how many steamship lines make regular calls at that port, and how many make irregular calls there during the year?

What is the nationality of each of the steamship lines, and how often do they make regular calls?

How many go north, and how many south?

Is Mazatlan the seaport for any important interior town?

What are the wharfage facilities, and who own the wharves?

Are the wharves free to all vessels; if not, what are the rates charged for wharfage privileges and are the rates the same to all ships?

What are the principal products exported and imported?

What are the principal products and resources of the country in the vicinity of this port?

Are the resources well developed, or are they in a state of development?

What products are exported and imported between the United States and this port, and what course does this commerce take to the north, via San Francisco or via Panama?

Are there any impediments in the way of shipments of either American or European commerce via Panama; if so, what are they?

Are there any goods imported and exported between the United States and this port by the way of Guaymas, going by rail to and from Guaymas and by water between Guaymas and Mazatlan?

Please give the same information in regard to San Blas, Mexico.
An early and full reply as quickly as is convenient to you would be greatly appreciated.
Very respectfully,

(Signed) J. L. BRISTOW,
Special Panama Railroad Commissioner.

Hon. LOUIS KAISER,
American Consul, Mazatlan, Mexico.

CONSULATE SERVICE, UNITED STATES,
Mazatlan, Mexico, March 20, 1905.

Gen. J. L. BRISTOW,
Special Panama Railroad Commissioner, Washington, D. C.

SIR: I have the honor to acknowledge the receipt of your communication of February 15, 1905, and the Department's dispatch under date of February 4, 1905, requesting me to furnish you promptly such information as you might call for relative to the facilities of shipping, wharfage, etc., of my district, and I take pleasure in inclosing herein my report on said subject.

I am, sir, your obedient servant,

LOUIS KAISER,
American Consul.

Shipping and wharfage facilities of Mazatlan, Mexico.

Mazatlan is the most important business center on the west coast of Mexico, has 18,000 to 20,000 inhabitants, and is, for Mexico, a modern city.

It is the headquarters of the Federal army for the state of Sinaloa.

The State of Sinaloa has an area of 35,721 square miles, and has over 300,000 inhabitants. The State contains about 17,500,000 acres of timber and agriculture lands, and some of the best mines in this Republic are located in this district.

The great obstacle to the full development of the resources of this State is that there is no railroad communication with the United States, but which, we are assured, will be established within two years or less by the building of the Kansas City, Mexico and Orient Railroad, which will connect the west coast of Mexico with Kansas City, as well as an extension of the International Railroad, the survey of which has just been finished between this city and Durango and which will be built by the International Railroad.

The want of railroad facilities is one of the greatest impediments to the advancement of the commerce of this coast, and in a few years, with railroad connections and transportation, will compete in the world's markets for trade.

The months of July, August, September, and October compose the rainy season, and no one should visit this section of Mexico during this season, either for pleasure or business, as the continued and heavy rains make travel almost impossible and very often dangerous.

We have an ideal climate during eight months of the year, which can not be surpassed anywhere.

Facilities of Mazatlan—Ocean transportation.

Pacific Mail Steamship Company.—This line has three steamers per month stopping at this point en route from San Francisco to Ancon, Canal Zone, and return. The steamers leave San Francisco each Saturday at 12 m., arriving here six days later, but one of their steamers sails direct to Acapulco, and does not call in this port, either on the down or up trip.

The price for a first-class ticket to Mazatlan is \$45 gold, and for steerage \$22.50, which includes meals.

Pacific Coast Steamship Company.—The steamer *Curacao*, belonging to this line, leaves San Francisco on the 7th of the month at 10 o'clock a. m., and arrives here on the 13th of each month, departing from here on the evening of the same day for ports on the coast of Lower California, calling in the ports of Altata, La Paz, Santa Rosalia, Topolobampo, and Guaymas, and on the 20th of the month the steamer returns to this port via the same route, and sails same day for San Francisco, calling in the ports of San Jose, Magdalena Bay, and Ensenada, all situated in Lower California. Passenger and freight rates are same as on the Pacific Mail Steamship Company.

Kosmos Line.—The steamers of this company run from Hamburg, Germany, to San Francisco and Puget Sound, and are intended mostly to carry freight, and touch here twice a month, once on their up trip and again on their down trip.

The steamers of this company do a very large business, and are frequently compelled to pass this port on account of carrying a full cargo.

Compania Naviera del Pacifico.—The former two Mexican coast steamship companies of Mazatlan consolidated about two years ago and formed one company, and is now known

and does business under the name of "La Compania Naviera del Pacifico," with a capital of \$1,058,000 Mexican silver, and their fleet consists of 10 steamers, three or four of which are modern steamers, which were built in England and are comparatively new.

Their general offices are located in this city, and most of the stockholders are residents of this city.

The steamers make regular trips between Guaymas and San Benito, Mexico, and way ports, as well as the ports of Lower California, and do a large and profitable business.

American sailing vessels.—Nearly all of the American sailing vessels arriving here come from San Francisco, and are loaded with dynamite, powder, fuse, lumber, etc., while a few carry a general cargo of merchandise. During the last few years a limited number of American sailing vessels have come here loaded with coal for this port.

Foreign sailing vessels.—These consist mainly of German vessels, manned invariably by German officers and crews, who bring their cargo directly from Germany, England, and Spain, and eight months are generally consumed in making the trip.

The vessels coming from Australia in the coal-carrying trade are mostly foreign vessels with mixed crews, officers as well as sailors.

There is a large number of small coasting vessels, mostly schooners, here, but they only do a coastwise trade.

The following shows the arrival of ocean vessels at the port of Mazatlan for the month of December, 1904:

Mexican sailing vessels.....	14
Mexican man-of-war.....	2
Mexican steamers.....	24
American steamers.....	8
American sailing vessels.....	2
German steamers.....	3
German sailing vessels.....	2
Total.....	55

Question. Is Mazatlan the seaport for any important town?

Answer. Mazatlan has no important interior town that depends on her for port facilities.

Question. What are the wharfage facilities, and who own the wharves?

Answer. There are no wharves here, and all vessels load and unload in an open bay by the aid of lighters, of which there is a large number—enough to load or unload a large vessel in one day, or as fast as the freight can be discharged from the vessel.

Question. What are the principal products exported and imported?

Answer. The principal products exported from this port are gold and silver bullion, ore, concentrates, copper matte, hides, dried and salted fish, shrimps, ixtle, Mexican silver dollars, fresh tomatoes.

The imports are flour, breadstuffs, fire brick, candies, wagons and vehicles, chemicals, drugs and patent medicine, watches and clocks, coal, coke, cotton goods of all kinds, stone, china, and glass ware, fiber and textile goods, dried and smoked fish, canned goods of all kinds, fruits, dried, canned, and fresh; nuts, furniture, window and looking glass, grease for soap stock, gunpowder, dynamite, caps, fuse for same, inks, printing and writing, instruments for medical and scientific purposes, iron and steel and manufactures of, jewelry of gold and silver, electrical devices and lamps of all kinds, leather and manufactures of, cement, marble, stone, musical instruments, naval stores, oils and paints, paper and stationery, perfumery, photographic goods, provisions, rice, silk and manufactures of, spirits, wines, and malt liquors; starch, tin, and manufactures of, toys, wood and manufactures of, wool and manufactures of, zinc and manufactures of, machinery of all kinds, hardware, iron pipes of all sizes, granite ware, Chinese matting, rugs, curtains of all kinds, notions, and box shooks.

Question. What are the principal products and resources of the country in the vicinity of the port?

Answer. Mostly products of mines and mining, agriculture, timber, stock raising, henequin or ixtle, shoes, cigars, leather, sugar, alcohol, and textile fabrics of cotton goods.

Question. Are the resources well developed, or are they in a state of development?

Answer. The resources of this country are nearly all in their infancy and undeveloped, and the signs of the times point to a great evolution of their resources, the extent of which two or three years ago no one would have dreamed or that it could be promoted in so short time.

Question. What products are exported and imported between the United States and this port, and what course does this commerce take to the north, via San Francisco or via Panama?

Answer. Up to about two years ago the exports and imports between the United States and this port, three-fourths of same went via San Francisco and but little via Panama. The calling of the steamers of the Kosmos Line at Panama during the past two or three

months has changed this considerable, and there is no doubt that as soon as the work on the canal is under full headway there will be but little difference of imports or exports in either terminals.

Question. Are there any impediments in the way of shipments of either American or European commerce via Panama? If so, what are they?

Answer. Very little business has been done from this port via Panama to either American or European commerce; that the only impediment now known here is the high rate of freight charges between San Francisco and New York and the urgent need of American sailing vessels between said ports or cheaper freight rates between these ports, as well as the extreme low freight charges made by German sailing vessels on freight coming direct from Germany, England, and Spain to San Francisco and intermediate ports.

Question. Are there any goods imported between the United States and this port by the way of Guaymas, going by rail to and from Guaymas, and by water between Guaymas and Mazatlan?

Answer. There is a large amount of goods imported and exported between the United States and this port by the way of Guaymas, by rail to and from Guaymas, and by water between Guaymas and Mazatlan, which I think will also increase annually, as this country is being more developed.

Question. Please give the same information in regard to San Blas.

Answer. Mostly all the imports and exports south of this port are done in Manzanillo, as the port facilities are so much better there than in San Blas, and San Blas has no local commerce, neither has it a consular agency from which I could secure some data.

I would most respectfully call your attention to the following article in one of the leading commercial papers of the United States:

"Simultaneously with the notice of the abrogation of the Pacific Mail contract for exclusive traffic with the Panama Railroad at Panama comes the news that the Kosmos Steamship Company is to force competition in the freight business between Panama and San Francisco. This is a German line of steamers now engaged in business between Germany and South and Central American ports and San Francisco. News has also been received that the Chilean Navigation Company is to make an active bid for Central American business via Panama."

LOUIS KAISER, *American Consul.*

Mazatlan, Mexico, March 20, 1905.

EXHIBIT D 22.

LIST OF QUESTIONS SUBMITTED TO THE AMERICAN CONSULAR AGENT AT GUAYMAS, MEXICO, AND HIS ANSWERS THERETO.

COLON, Isthmus of Panama, February 15, 1905.

MY DEAR SIR: As indicated in a letter from the Secretary of State, which you doubtless have received, I beg to make the following inquiries, and ask that you forward your reply to me at Washington:

What are the shipping facilities of Guaymas by sea; that is, how many steamship lines make regular calls at that port and how many make irregular calls there during the year?

What is the nationality of each of the steamship lines, and how often do they make regular calls?

How many go north, and how many go south?

Is Guaymas the seaport for any important interior town?

What are the wharfage facilities, and who own the wharves?

Are the wharves free to all vessels; if not, what are the rates charged for wharfage privileges, and are the rates the same to all ships?

What are the principal products exported and imported?

What are the principal products and resources of the country in the vicinity of this port?

Are the resources well developed, or are they in a state of development?

What products are exported and imported between the United States and this port, and what course does this commerce take to the north, via San Francisco or via Panama?

Are there any impediments in the way of shipments of either American or European commerce via Panama; if so, what are they?

What are the rates by steamer to San Francisco and to Panama and the principal intermediate ports?

An early and full reply as quickly as is convenient to you would be greatly appreciated.

Very respectfully,

(Signed) J. L. BRISTOW,

Special Panama Railroad Commissioner.

Hon. FRANK M. CROCKER,
American Consular Agent, Guaymas, Mexico.

SIR: In con-
answers to qu-

1. Three ste-
2. Compania
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nillo, stopping
Pacific Coast
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3. Answer to
4. Guaymas
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5. One whar-
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6. Wharf is
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7. There is no
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8. See answe-
9. Resources

10. See answe-
11. None wh-

12. No publi-
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CONTRACTS BET-
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CONSULAR SERVICE, UNITED STATES,
Guaymas, Mex., March 17, 1905.

SIR: In compliance with your letter of February 15, I have the honor to submit following answers to questions contained therein:

1. Three steamship lines.
2. Compania Navegacion del Pacifico, a Mexican company with headquarters at Mazatlan; operates 10 vessels of different tonnage, none over 500 tons. The company does not publish a regular schedule; they cover all the territory south of here, on both sides of the Gulf, some of their vessels going as far as San Benito.
- Compania de Navegacion Mexico y Oriente, a Mexican company with headquarters at Topolobampo, operates one vessel that makes regular trips between Guaymas and Manzanillo, stopping at way ports. The trip is made every seventeen days.
- Pacific Coast Steamship Company, an American company; operates one vessel between San Francisco and Guaymas, stopping at Ensenada, La Paz, Mazatlan, Altata, and Santa Rosalia. Monthly service.
3. Answer to question 2 covers.
4. Guaymas is the port for practically the entire State of Sonora. Hermosillo, distant 90 miles from the coast, is the largest town; about 18,000 inhabitants.
5. One wharf, capable of accommodating vessels of 16 feet draft, at low tide; owned by the Sonora Railway. Wharf is used in the interchange of business between vessels and the railway; local business southbound and shipments arriving by water for Guaymas proper, handled by lighters.
6. Wharf is free to all vessels; the railway reserves the right of loading and unloading, assessing a charge of \$1 per 1,000 kilos for ordinary traffic, special rates on certain commodities.
7. There is nothing exported by water except merchandise; imports are of same nature. The bulk of imports come by rail, and consist of all known commodities in common use, the bulk of which is purchased in the United States. Exports to the United States and through the United States, consist of bullion, ore, leather, hides, oranges, and dried pease.
8. See answer to question 7.
9. Resources are in a state of development.
10. See answer to question 7.
11. None whatever.
12. No published rate to either San Francisco or Panama, prevailing rate to San Francisco is from \$10 to \$12 per ton Mexican money; rate from San Francisco to Guaymas is \$17.50 per ton of 2,000 pounds, Mexican money. I inclose Compania de Navegacion Mexico y Oriente local tariff, which will give an idea of rates obtaining south of Guaymas.

Respectfully,

FRANK M. CROCKER.

Hon. J. L. BRISTOW,
Special Panama Railroad Commissioner, Washington, D. C.

EXHIBIT E.

CONTRACTS BETWEEN THE REPUBLIC OF NEW GRANADA AND THE PANAMA RAILROAD COMPANY, MADE IN 1850 AND 1887, AND MODIFIED IN 1876, 1880, AND 1891.

EXHIBIT E 1.

Contract between the Republic of New Granada and the Panama Railroad Company, made in 1850.

Contract in respect to the privilege of constructing a railroad from one ocean to the other by the Isthmus of Panama.

The executive power, being authorized by the legislative decree of June 12, 1849, to amplify and amend the contract entered into in Washington on the 28th of December, 1848, for the construction of a railroad on the Isthmus of Panama, and it being advisable for this purpose to conclude and execute a new contract, in which the rights acquired and the obligations incurred by the Government of New Granada and the Panama Railroad Company may be clearly established, without need of reference to the contracts previously entered into on the subject, the citizen president of the Republic of New Granada has thought proper to empower for this purpose Victoriano de Diego Paredes, secretary of state for foreign affairs of the said Republic, and the Panama Railroad Company John Lloyd Stephens, vice-president of said company and its commissioner in New Granada, who, after mature conference, have agreed upon the following contract:

CHAPTER FIRST.—*Of the rights, privileges, gifts, franchises, and exemptions granted to the company.*

TITLE FIRST—GRANT OF PRIVILEGES.

ARTICLE I.

The Government of New Granada grants to the company, styled the Panama Railroad Company, its representatives or assigns, the exclusive right of building a railroad between the two oceans, across the Isthmus of Panama.

ARTICLE II.

The privilege of building a railroad, granted to the company by the preceding article, shall continue in force forty-nine years, to be computed from the day of the completion of the road and its being opened to public use. Nevertheless, said privilege shall terminate before the expiration of the said forty-nine years, if before their expiration the Government shall have resumed the privilege by virtue of the right and power reserved by the following conditions:

At the expiration of twenty years, counting from the day on which the railroad shall have been completed and opened to public use, the Government may resume the privilege for the benefit of New Granada, on paying the sum of five millions of dollars as the whole amount of indemnification. If the privilege be not resumed at that date, it shall continue in force ten years longer for the benefit of the company, at the end of which the Government may resume it, on paying four millions of dollars. If the privilege be not resumed even at the expiration of the last-mentioned period, then it shall continue in force for ten years longer, at the expiration whereof the Government may resume the same on payment of two millions of dollars. To entitle the Government to avail itself of the rights thus reserved to it of resuming the privilege granted, it must notify the company of its intention so to do at least one year before the day of the completion of either of the three periods above mentioned.

ARTICLE III.

The sum to be paid to the company on the resumption of the privileges in either of the three cases mentioned in the preceding article shall be in specie, in American dollars, without deduction, it being well understood that in all other cases in which mention is made of dollars in this contract, it is of American dollars, without deduction.

ARTICLE IV.

The company shall, after the resumption of the privilege, remain in possession of the lands granted to it gratuitously and perpetually by the eighteenth article of this contract.

ARTICLE V.

The railroad from ocean to ocean shall be completed within six years, to commence from the expiration of four months after the present act of concession shall have been approved by the Congress of the Republic, and the fact of its completion shall be proved before the governor of Panama, at the request of the company, by a statement drawn up on each side, after discussion between it and the agent or agents of the executive power commissioned for that purpose.

ARTICLE VI.

While the exclusive privilege granted to the company, or persons engaged in the enterprise of building the railroad from one ocean to the other, continues in force, the Government of the Republic agrees neither itself to build nor to grant to any other company whatever, under any title whatever, the right of building any other railroad on the Isthmus of Panama; and it is likewise stipulated that, while the said privilege continues in force the New Granadian Government shall have no power to undertake, nor to permit any other person to undertake, without the concurrence and consent of said company, the opening of any maritime canal to unite the two oceans across the said Isthmus of Panama.

ARTICLE VII.

During the whole term specified in the preceding article and without interfering with the completion in due season of the railroad, the company shall have also the exclusive right of making across the Isthmus of Panama any sort of road for wheel carriages, either from

ocean to ocean Government to undertake civilized carriages, be well understood manner previous exist, or which

The company River by steam terms specified meantime, be a transportation may now be

Exclusive First. To n of vessels Second. To re deposit c railroad built compensation undings, war and carriage

The execu her ocean s destination ly inrodu Seven all fra and dispatch kinds which

During the public use suc in use, as it's p into the enjoy present grant

The complet esion of the company, how nance of artic should be thus r in the afore

The compan Panama such departure and nce and anc places for light sung at its free shall be unders of this contract

ocean to ocean, or to any point on the River Chagres. Consequently, the New Granadian Government binds itself not to undertake, nor to permit any other company or individual to undertake, during the term specified in this article, the building of any other macadamized carriage road, plank road, or road of any other kind suitable for the use of wheel carriages, between the two oceans, across the Isthmus of Panama; it being, nevertheless, well understood that the privilege of which this article treats can not and must not in any manner prevent the completion, preservation, and improvement of roads which already exist, or which are actually being constructed on the said Isthmus.

ARTICLE VIII.

The company shall have, moreover, the exclusive privilege of navigating the Chagres River by steam power until the railroad is completed from one ocean to the other on the terms specified in this contract and in accordance with its provisions: the company, in the meantime, being bound to keep constantly on said river one or more steamboats employed in transportation; but the provision in this clause shall not prevent steamboats, which may now be in said river from continuing to navigate the same.

ARTICLE IX.

Exclusive privilege is also granted to the company for ninety-nine years.

First. To use the ports situated at the two termini of the railroad, required for the anchorage of vessels, and for the loading and unloading of goods which are to pass over the said road.

Second. To use the landings necessary, and especially those designed for the storage and deposit of all goods and merchandise admitted for transit across the Isthmus on the railroad built by the company. By virtue of said privilege, the company shall collect as a compensation for the use of the line of communication, means of transit, in, ports, landings, warehouses, and establishments of all kinds belonging to it, for the storage, and carriage as the company may think proper.

ARTICLE X.

The executive power shall determine the fees to be collected for the landing of goods on either ocean, and the intervention therein of the Government of the Republic to prevent goods destined for transit from one ocean to the other from being left on the way or fraudulently introduced for internal consumption. Said precautions shall be such as may tend to prevent all frauds to the injury of the public revenue, without delaying or embarrassing the rapid dispatch and transit of passengers and packages of merchandise, luggage, and goods of all kinds which may be subjects of lawful commerce.

ARTICLE XI.

During the progress of the railroad toward completion the company may open to public use such portion thereof as may be passable and as may be judged proper, without delay, as its partial completion progresses. The company may also then enter properly into the enjoyment of the grants, privileges, and advantages which form the subject of the present grant, in conformity with the provisions of the second chapter of this contract.

ARTICLE XII.

The completion of one-half of the railroad shall secure to the company the absolute possession of the entire privilege hereby granted, and of all the rights appertaining to it; the company, however, remaining always bound to complete the said within six years, in pursuance of article fifth, or in eight years, in case the period of such completion of the said road should be thus far extended, in default of which it shall forfeit the fees and pecuniaries provided for in the aforementioned second chapter of this contract.

ARTICLE XIII.

The company may give to the railroad between the two oceans across the Isthmus of Panama such direction as it may judge most favorable for the enterprise; the points of departure and arrival which it may consider most advantageous and convenient for the entrance and anchorage of vessels, or for ports properly so called, and for wharves, dry docks, places for lighterage, landings, warehouses, stations, hotels, and establishments of all kinds, being at its free option; it being, nevertheless, stipulated that the provisions of this article shall be understood without prejudice to what is hereinafter provided in article fifty-second of this contract.

ARTICLE XIV.

The company is also at liberty to select the mode which it may consider most favorable for the construction and working of the railroad, provided it be completed in such a manner that travelers and goods passing over it may be transported in twelve hours at the farthest from one ocean to the other, and vice versa.

TITLE SECOND. GRANTS OF LANDS.

ARTICLE XV.

In consideration of the difficulties of the enterprise, and of the direct and indirect advantages which the Republic must derive from it, various grants of lands are made to the company on the continental part of the Isthmus, comprised within the limits which bounded the Provinces of Panama and Veraguas, on the first day of January, one thousand eight hundred and forty-nine. The Government of the Republic grants, therefore, gratuitously to the company on the terms mentioned in this article.

First. The lands which may be necessary for the building of the line of the railroad through its whole extent.

Second. All the lands which it may require for the establishment of sea ports, dry docks, river ports, landings, wharves, places for lightering, warehouses, stations, hotels, and in general for all purposes necessary in the construction and working of the railroad.

ARTICLE XVI.

Although, according to what is expressed in the preceding article, the company has the right to vacant lands on the islands adjacent to the Isthmus of Panama, the Government of the Republic, nevertheless, binds itself to grant to the company all the vacant lands on the Island of Manzanillo, in the Bay of Limon, whenever the company considers it proper to extend the work of the railroad to said island, so that one of its extremities terminate thereon.

ARTICLE XVII.

The grant of vacant lands mentioned in the two preceding articles is to be understood as referring to lands belonging to the Republic. With regard to those which are the property of individuals, the company must obtain them from their owners, after valuation and proper indemnification, in the manner specified in article twenty-first.

The lands granted by the Government of the Republic, as specified in the two preceding articles, shall revert to its possession and jurisdiction immediately on the expiration of the privilege; and shall be restored to it by the company on the dates fixed for the purpose in the prescribed form and agreeably to the conditions specified in the second article of the contract, wherein the duties and obligations assumed by the company are stated.

ARTICLE XVIII.

A grant is, moreover, made to the company gratuitously and in perpetuity of one hundred thousand fanegadas of vacant land in the provinces of Panama and Veraguas, within the limits set forth in the first part of the fifteenth article, which may be increased to one hundred and fifty thousand, if such extent be found at the disposal of the Government in the two provinces above mentioned, so that the Government can pronounce them vacant, and the company shall have the liberty to select them, in the continental part of said provinces, where it may judge most proper. It being stipulated that in those which may be selected on the line of the road or in its vicinity, intervals shall be positively left of equal extent to those which the company reserves to itself, so that the Government of the Republic may make grants or sales of land for other establishments which may be made on said line or in the vicinity of the road.

The one hundred thousand fanegadas of land, or such number thereof up to the number of one hundred and fifty thousand fanegadas, which may be at the disposal of the Government as vacant and granted to the company, may be used to make thereon encampments for workmen, fields for cultivation, pastures for beasts of burden and cattle, places for cutting wood, for building or for fuel, and in general for establishments suitable for facilitating any industrial operations undertaken by the company, especially those relating to colonization.

If, which is not to be expected, there should not be within the limits of the provinces of Panama and Veraguas, mentioned in the preceding fifteenth article, the vacant lands necessary to secure to the company the one hundred thousand fanegadas specified in this article, those which may be wanted to complete the one hundred thousand fanegadas will be granted at the points which the said company may designate in the continental part of the provinces

of Cartagena, Santamarta, Riohacha, and Choro; this grant and the others mentioned in the present article being understood in reference to the vacant lands which belong to the State, and to no others.

The Government of the Republic will make no grants of vacant lands within the limits mentioned of the provinces of Panama and Veraguas until after those mentioned in this article have been delivered into the possession of the company, saving, nevertheless, the right which any other person may have acquired by virtue of grants of the Granadian Government anterior to the date of the present contract.

ARTICLE XIX.

The vacant lands granted to the company by the eighteenth article of this contract, are given to it in full ownership; and the company may freely dispose of them during the continuance of the privilege granted, and after the termination of said period, or the resumption of the said privilege.

ARTICLE XX.

The lands mentioned in the preceding article, and the lands appropriated for the railroad, will be delivered to the company as they may be requested, and agreeably to the provisions of the fifteenth, sixteenth, seventeenth, and eighteenth articles of this contract.

ARTICLE XXI.

When the lands required for building the railroad for ports or any other appurtenances of works of said road are the property of individuals, the company shall have the right to take them, by order of the governors of the respective provinces, after valuation made and just indemnification given to the owner, in conformity with the provisions of the law of June 2, 1848, defining the cases in which property may be taken for public use, and the forms to be observed in such cases.

As soon as the company of the vacant lands granted gratuitously to it shall be effected, and as soon as they may be designated by the company, after proof of their character as vacant lands, a survey and an appropriation to it by the governor of the respective provinces. This provisional appropriation shall be submitted to the examination and approval of the Executive Power. So long as it shall not be confirmed it shall only produce effect in preventing any subsequent grants of the lands in favor of a third person; but from the time that it has been examined and approved, in conformity with this article, it shall have the same effect as if it had been confirmed.

ARTICLE XXII.

In case of any difficulties or obstacles should be found in carrying it out on the line, the company shall have the right to use the lands made of the vacant lands, which it can obtain gratuitously according to the stipulations of the fifteenth article.

ARTICLE XXV.

The company shall have the right to

ARTICLE XXVI.

The company is authorized to propose to the executive power such regulations as it may judge proper for the police, security, use and preservation of its ways of communication, ports, works, and establishments of all kinds; but such regulations shall not take effect without the express approval of the executive power, which even after having approved may annul or amend them, if it think proper, proceeding always in conformity with the laws of the Republic.

ARTICLE XXVII.

The rates of transportation or freight of money, carriage of merchandise or travelers over the railroad, of port dues, board and storage in its depots and establishments, shall be fixed by the company, and modified as it may judge proper, making them immediately known to the local authorities in order that the public may be informed of them.

ARTICLE XXVIII.

All correspondence which may arrive from the territory of the Republic or from foreign countries, to be transported over the railroad, whatever may be its destination, must absolutely pass through the post-offices of New Granada, which shall open with the company an annual account current of postage, in order to compute the share of profits belonging to New Granada, in conformity with the provisions of the thirtieth article of this contract, and in order to guard against fraud in this respect.

ARTICLE XXIX.

To carry out the stipulation in the preceding article, the company bind itself not to receive any other packages of correspondence than those delivered to it by the post-offices of New Granada, to be carried by the railroad to their port of embarkation or to the point on the Isthmus for which they may be destined on the line of the said road, complying with the regulations which the executive power may lay down on the subject, and also with those which may be given for the carrying on said road of the correspondence of foreign nations which may be delivered to the company by the officers of the Republic for that purpose.

ARTICLE XXX.

The executive power shall at all times determine what foreign nations may be permitted to transport their correspondence across the Isthmus of Panama by the railroad; but in all cases in which the mails of foreign nations shall be permitted to pass by the Isthmus of Panama, all contracts and pecuniary agreements for their transportation by the said railroad shall be made by the company, and all the pecuniary proceeds of such contracts and agreements shall go into the funds of the company as a branch of its profits. In compensation for this privilege the company undertakes to transport by the railroad free of charge all the mails of New Granada, and moreover to pay to the Government of the Republic five per cent on all sums of money which it may receive in virtue of said contracts and agreements, whether such sums proceed from contracts which the company may enter into with foreign governments, or with other companies, or from the general regulations which it may establish for the carrying of the correspondence of nations which may not have entered into special contracts with it.

And it is also stipulated: First, That whatever may be the profit which the company may receive by virtue of such contracts and agreements, in no case shall it on this account pay to the Government of New Granada less than ten thousand dollars per annum; second, that this payment shall be over and above the three per cent of the net profits of the enterprise to which New Granada is entitled; and, third, that the power of the company to enter into such contracts or pecuniary agreements shall not be opposed in any manner to the contracts or agreements which now exist between the Republic of New Granada and any foreign nation or nations for the transportation of mails on the Isthmus of Panama.

ARTICLE XXXI.

The services of all kinds which the company is to perform on the railroad during the continuance of its privilege shall be performed exclusively by its agents and with the materials belonging to it, unless it should choose to perform them in another way.

ARTICLE XXXII.

The company may freely introduce into the Isthmus, without paying duties or taxes of any kind, all the implements, machines, iron tools, material, and manufactured articles intended for the construction, working, and preservation of the railroad, and also the articles required for the subsistence and clothing of the workmen employed in the work, during the whole period of the construction of the road; being subject in this respect to the regulations which the executive may establish.

No taxes imposed upon property, and power, are necessary in execution of this contract. The Government of the State shall be responsible for the company and with the freight or for

Passengers across the Isthmus, taxes and exemption is ports, stores, tries, but the shall pay the have the way under the co regulations la

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ARTICLE XXXIII.

No taxes or contributions, national, provincial, municipal, nor of any other kind, shall be imposed upon the railroad or upon its warehouses, furniture, machines, or other works, property, and effects of any kind belonging to it, and which, in the judgment of the executive power, are necessary for the service of the said railroad or its dependencies; and in compensation it is expressly stipulated that in every case, and notwithstanding any provisions of this contract to the contrary, the troops, warlike stores, arms, clothing, and other effects of the Government of the Republic, and persons coming to it as new settlers on account of the State shall be transported gratuitously over the railroad at the charge and cost of the company and without the Government or such troops or colonists having to pay anything for freight or for any other cause.

ARTICLE XXXIV.

Passengers, money, merchandise, goods, and effects of all kinds which may be transported across the Isthmus, to go from one ocean to the other by the railroad, shall be exempt from taxes and imposts—national, provincial, municipal, or of any other description. The same exemption is extended to all effects and merchandise which may remain on deposit in the ports, stores, and landings of the company destined either for the interior or for other countries, but the merchandise or effects destined for consumption in the interior of the Republic shall pay the duties and imposts established, or which may be established, when such goods leave the warehouses of the company, to which end their delivery shall be conducted under the cognizance of the officers of the Republic, and in conformity with the laws and regulations laid down by the executive.

ARTICLE XXXV.

Foreigners who may form settlements on the vacant lands granted gratuitously to the company shall be exempt, during the space of twenty years from the date of the formation of such settlements, from all forced contributions and from tithes and first fruits on their agricultural property and their products for home consumption. They shall be entitled to receive letters of naturalization as soon as they solicit them, on fixing their residence in the territory of the Republic, and during the said term of twenty years from the formation of their settlements they shall not be obliged to serve in the army, navy, or national guard, nor to take arms in defence of the Republic, save in case of foreign invasion.

ARTICLE XXXVI.

Travelers passing from one sea to the other over the railroad shall not require any passport to pass over it, except in cases of foreign war or internal political commotion, when the Government may deem the presentation of passports expedient for the security of the country or the preservation of public order. Nevertheless, persons who have been expelled from the territory of the Republic or other individuals whom the laws may have forbidden to enter it shall not pass over the Isthmus.

CHAPTER SECOND.—Of the duties and obligations assumed by the company.

ARTICLE XXXVII.

The company undertakes to execute, at its own expense, risk and peril, all the works necessary for the establishment and construction of a railroad to connect and keep up a line of communication between the two oceans across the Isthmus of Panama.

ARTICLE XXXVIII.

The said works shall, unless in case of superior force, be commenced within the period of eighteen months, which shall begin to run four months after the approval of this contract by the Congress of the Republic. Works of a definite nature in respect to the laying out of the line, indispensable to its execution, shall be regarded as the beginning of the enterprise.

ARTICLE XXXIX.

The said works shall be completed within the term of six years, counting from the expiration of four months after the approval of this contract by Congress, so that the railroad undertaken by the company shall be passable in all its parts at the expiration of the term so specified; but if, after constructing and making passable one-third part of the railroad, the company should find that it can not finish it in its whole extent in the six years agreed upon

in this article, it shall have the right to ask an extension of the term, which shall be granted by the Executive for two years in addition to the six years fixed for the completion of the whole railroad, without incurring thereby any of the penalties contained in the second chapter of this contract.

ARTICLE XII.

The company shall secure the fulfilment of the obligations assumed by it for the execution of the works of the enterprise which is the subject of this contract in the sum of one hundred and twenty thousand dollars; but it shall not be necessary for the company to deposit this sum in cash, but only to secure it by means of an instrument of double the amount, executed with all proper solemnities and to the entire satisfaction of the Government of the Republic, to answer by virtue of such security for the said sum of one hundred and twenty thousand dollars in case the railroad should not be completed within the time stipulated in this contract and in accordance with the provisions herein agreed upon.

ARTICLE XIII.

In case the privilege should become void in consequence of failure to begin the work, or from its not being completed in the manner and within the period prescribed therefor, the company shall forfeit in favor of the Republic the sum of one hundred and twenty thousand dollars, mentioned in the preceding article.

ARTICLE XLII.

If the company should not have made its preparations for beginning its works according to the thirty eighth article, and if it should not have actually begun the same twenty-two months after this contract has been approved by Congress, it shall forfeit all the privileges and advantages which result to it therefrom, unless the agents of the Government of the Republic should not have effected the delivery of the lands necessary for the road within three months after they have been demanded by the company. In this case the term allowed by the thirty eighth article for the commencement of the work shall be extended for a period equal to that of the delay it has sustained in the delivery of the lands after the three months from the time of their being demanded.

On no account and at no time shall the work of the railroad be suspended by reason of differences which may arise between the company and the owners of the land as to the value which must be put upon such as it may be necessary to purchase for the building of the said road; but in order to give positive guaranties to such owners, and that their rights may not in any manner be prejudiced, the company shall execute a personal undertaking or mortgage sufficient in the judgment of the governor of Panama to answer for the price which may be fixed for said lands, according to the law of the second of June, one thousand eight hundred and forty-eight, "Of expropriation."

ARTICLE XLIII.

If at the end of the six years fixed for the completion of the railroad the company should not have completed half of the work, it shall incur the penalty of the avoidance of the privilege, and forfeit the sum of one hundred and twenty thousand dollars secured by the obligation in double the amount which it is to execute as a guarantee of the fulfilment of the conditions which it assumes. The company shall incur the same penalties if at the end of eight years the works of the railroad shall not be completed and the said road passable throughout, in the manner and form and according to the conditions set forth in the contract.

ARTICLE XLIV.

In case of forfeiture legally declared against the company, it shall be bound to return to the Government the lands granted gratuitously to it, and in the same conditions in which they may be when the forfeiture is pronounced, without any obligation on the part of the New Granadan Government to make to the said company, or to its assigns, any indemnification for improvements or for any other cause.

ARTICLE XLV.

After the entire completion of the work of the line of the railroad, the company shall order a survey of the lands to be made at its own expense, with notice to the owners of the lands adjoining, together with a statistical plan of all the parts of the road which are to be returned with it to the Republic at the time of the expiration of the privilege. It shall also order a descriptive statement to be made, at its own expense, of the bridges, aqueducts, and other works of art which may have been constructed, and which are to be returned to the Republic at the same time.

ARTICLE XLVI.

The company shall make also, at its own expense, similar descriptive statements of all the subsequent works of the same kind which it may afterwards construct during the period of its possession of the privilege.

ARTICLE XLVII.

An exact and authenticated duplicate of the statistical plan and descriptive statements above mentioned shall be delivered by the company to the governor of Panama, or sent to the office of the secretary for foreign affairs, to be deposited in the national archives for use in case of need, during the continuance of the privilege, or at the end of its expiration.

ARTICLE XLVIII.

One year before the expiration of the privilege the company shall be bound to make, on its own account, and after hearing the agents of the Republic commissioned for the purpose, valuations, statements, and inventories of the immovable property, bridges, aqueducts, and other works of art, which are to be returned to the Republic, agreeably to the descriptive statements and statistical plan, of which the duplicates shall have been deposited in the archives of the administration of New Granada.

ARTICLE XLIX.

At the expiration of the term of the privilege, and by the mere fact of its expiration, or in case of the resumption of the privilege, as provided in the second article of this contract, and by the mere fact of the resumption, the Government of New Granada shall be substituted in all the rights of the company in the ownership of the lands and of the works of art, designated in the statistical plan and in the inventories and descriptive statements above mentioned, and shall enter immediately into the enjoyment of the line of communication, all its appurtenances and dependencies, and of all profits accruing therefrom. The company shall be bound to deliver to the Government in good condition the roads, the works which compose them, and their appurtenances, such as the places for lightering, for discharging cargo, guardhouses for the inspectors, offices for the collection of freight and baggage, machines fixed or movable, and in general all objects movable and immovable destined specially for the service of transportation, or applicable to any other object connected with the enterprise, and whether included or omitted in the said plans, inventories, statements, and statistical tables.

ARTICLE L.

Whatever is already specified, it is hereby expressly stipulated that, from the date of the expiration of the privilege, whatever the privilege of the company shall terminate or be resumed, the Republic shall enter immediately and gratuitously into the ownership and possession of all the objects which form the subject of articles 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 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ARTICLE LI.

In consideration of the collection and receipt of the duties and rates of transportation fixed by it, the company binds itself always to effect with care, punctuality, and celerity, and without exception as to national character, the transportation of travelers, cattle, merchandise, goods, and materials of all kinds which may be confided to it, all of which shall

be transported without any deduction from the established prices, except such as it may allow in favor of nations which are now bound, or which may hereafter become bound, by means of public treaties entered into with New Granada, to guaranty positively and effectually to this Republic its rights of sovereignty and ownership over the territory of the Isthmus of Panama, and the perfect neutrality of said Isthmus, to the end that the free transit from one sea to the other may never be interrupted or embarrassed; but notice is expressly given, and in fact it is hereby especially stipulated that New Granada, Granadians, and their property shall enjoy all the benefits and advantages which any other nation whatever may obtain by virtue of the provision in this article.

ARTICLE LII.

Whatever may be the line selected by the company for building the railroad between the two oceans, one of its extremities shall be the city of Panama.

ARTICLE LIII.

Vessels of nations at war with New Granada shall not be admitted into the ports at either extremity of the railroad, nor shall the productions, effects, and property of such nations have free transit across the Isthmus on said road.

ARTICLE LIV.

The expenses of surveying and laying off the lands granted to the company, the cost of the statistical plan, inventories, and descriptive statements mentioned in this contract, as well as the expenses and cost of the titles of ownership to be given by the authorities or notaries of the Republic, shall be borne by the said company; but all documents, of whatever nature, drawn up in the execution of this contract, shall be registered without cost.

ARTICLE LV.

The company binds itself to pay annually to the Government of New Granada three per cent of the net profits of the enterprise, in the same proportion in which they are to be distributed in form of dividends to the shareholders, without taking into account, in the payment of the said three per cent, any deduction for the supposed interest of the capital of the company, or for any sum which the shareholders may designate as a reserve or sinking fund. It is stipulated that for the receipt of this duty the Government of New Granada shall look, with the shareholders of the enterprise, to the accounts produced and liquidated at the general meeting of the company, which accounts the agent of the Republic may examine, and in respect to them he may make observations in the same manner as any shareholder, but without power of interfering in the general management of the company. Besides what is stipulated in this article, it is also agreed that the payment of the said duty of three per cent shall be made at Bogota, Panama, or New York, as the Government of the Republic may direct.

ARTICLE LVI.

The company selects New York as its domicile, and will maintain in Panama a representative with powers sufficient to act in its name in all cases where it may be necessary.

ARTICLE LVII.

The present privilege can not be granted or assigned to any foreign government—that is, to any government out of the New Granadian territory—under penalty of forfeiture of the privilege, by the mere fact of attempting or carrying into effect such grant or assignment; and, although it should at any time be attempted or carried into effect, it will be, and from this time is, declared absolutely null and of no force or effect.

ARTICLE LVIII.

Wherever in this contract mention is made of the completion, expiration, or termination of the privilege granted by it, all that is said in reference to such completion, expiration, or termination shall be understood as said and applicable also to the case of the resumption of the said privilege. Consequently it is expressly stipulated that at any time when the said privilege may be resumed, according to the second article of this contract, the Panama Railroad Company shall fulfill all the duties incumbent upon it, in the same terms as if the forty-nine years, which the privilege at the utmost may extend, had expired; and it is also expressly stipulated that for the sum which may be paid as indemnification to the Panama

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Railroad Company, in any of the three cases set forth in the article last mentioned, the Government of New Granada shall acquire not only the rights, but also all the material objects, which the company is bound to deliver to it on the expiration of the privilege, which delivery shall be made as may be established by general regulation, on the same terms on which it should take place, if the forty-nine years which the privilege at the utmost may continue, had expired.

ARTICLE LIX.

Controversies which may arise between the executive power of New Granada and the Panama Railroad Company, in regard to the fulfilment or failure in fulfilment of this contract, or upon the understanding or construction of the clauses it contains, shall be determined by the magistrates and according to the laws of the Republic of New Granada. In no case shall any privilege, immunity, or exemption be alleged which is not expressly recognized or granted in this contract; nor will the intervention of any authority or functionary other than those legally established with jurisdiction in the Republic be allowed. Such controversies as may affect the existence, preservation, or permanency of the privilege and of the rights thereunto appertaining shall be decided by arbitration.

ARTICLE LX.

The Government of the Republic binds itself to protect and maintain, fully and entirely, the rights of the company under this contract; and to this end it agrees that where doubts occur in the construction of any clause or clauses inserted in the preceding articles, which secure to the company any inducements or advantages, if such doubts should occur in consequence of such clauses not being sufficiently explicit, they shall be interpreted in the natural signification most favorable to the company.

ARTICLE LXI.

All the legislative acts, decrees, and agreements by which, in former years, various privileges were granted for the opening of an intermarine communication by the Isthmus of Panama are irrevocably annulled. Consequently the "Panama Railroad Company" has the sole right and duty of constructing a railroad from one ocean to the other by the said Isthmus, in conformity with the stipulations of this contract, which is the only one remaining in force on the subject between the Government of the Republic and said company, since by this clause not only all the acts, decrees, and agreements above mentioned, but especially all the contracts and stipulations, which formerly existed between the said Government and the said company, or the individuals, of whose rights it is the assignee, are annulled.

ARTICLE LXII.

This contract, as divided into two chapters and extending to sixty-two articles, shall be submitted for approval to the executive power of the Republic, and that being obtained, shall be presented by it to Congress, the consent and approval of which are required, in order that, receiving the force of a law, it may be carried into effect.^a

The railroad enterprise being of public utility, the authorities shall afford it all possible protection in conformity with the laws.

EXHIBIT E 2

Contract between the United States of Colombia and the Panama Railroad Company.

[Translated from the Spanish by John W. Carrington, C. E.]

Contract reformative of that of 15th April, 1850, concerning the construction of a railroad from one ocean to the other, across the Isthmus of Panama.

The secretary of finance and public improvements of the United States of Colombia, duly authorized by the executive power, on the one part, and on the other George M. Totten, engineer in chief and general agent of the Panama Railroad Company, with full power and authority from the directors of said company, having in consideration the stipulation in Article II of the contract made with said company, and approved by the legislative decree of the 4th of June, 1850, and desiring to provide whatever may be needful for the perfection

^a Congress approved June 4, 1860.

of the work of the said railroad, in order that it may better answer the necessities of the commerce of the world, and at the same time furnish a sure and permanent revenue to the treasury of the Republic, have agreed to modify and reform the said contract in the terms set forth in the following stipulations:

ARTICLE I.^a

The Government of the United States of Colombia concedes to the Panama Railroad Company the use and possession, for ninety-nine years, of the railroad constructed by it, and which actually exists between the cities of Colon and Panama. This concession comprises not only the road, but also the dependencies which the said company is in possession of at the present time, necessary for the service of the transit, and those which it may hereafter establish, such as buildings, warehouses, wharves, telegraph between Colon and Panama, etc.

ARTICLE II.^b

The Government of the Republic binds itself during the time in which the exclusive privilege which is conceded to the company for the working of the railroad remains in force, not to construct for itself, nor to concede to any person or company, by any title whatever, the power to establish any other railroad on the Isthmus of Panama; and it also stipulates that while the said privilege continues in force the Government shall not have the power of undertaking for itself, nor of permitting any person to undertake, without the concurrence and consent of the said company, the opening or working of any maritime canal which may unite the two oceans across the said Isthmus of Panama, to the westward of the line of Cape Tiburon on the Atlantic and of Point Garachiné on the Pacific. But it remains stipulated that the right which is conceded to the company to give its consent does not extend to its opposing the construction of a canal across the Isthmus of Panama (except upon the route of the railroad itself) but only to its exacting an equitable price for such privilege and as indemnification for the damages which the railroad company may suffer by the rivalry or competition of the canal.

If the sum which may be demanded by the company shall not appear equitable to the Government of the United States of Colombia, then it shall be fixed by arbitrators in New York or Panama, one to be named by the Government, the other by the company, and in case of their not agreeing the two shall name a third, whose decision shall be without appeal. In pronouncing their decision the arbitrators shall take into consideration the grounds upon which the company rests and the information which the Government shall give upon the matter, and in view thereof shall decide, without appeal, as they may deem most just and equitable. The sum, whatever it may be, which shall be finally designated, shall belong one-half to the railroad company and one-half to the Government of Colombia.

ARTICLE III.^c

In compensation of and as a price for these concessions the railroad company obligates itself to pay to the Government of the United States of Colombia one million of dollars in American gold or two hundred thousand pounds sterling in bills on New York or London, as the Government may elect, on the day on which this contract shall be approved by the Congress, and to pay during the whole term of the present privilege an annual revenue of \$250,000 in American gold or in bills on New York or London.

The payments shall be made quarterly in New York to the agent designated by the Government of the United States of Colombia, or, if the Government shall desire it, the company will place the money in London or in Panama, the Government giving the necessary advice to the company in New York. These quarterly payments shall commence to count from the day of the approval of this contract by the Congress.

ARTICLE IV.

The company binds itself to extend the railroad on the Pacific side to the islands of Naos, Culebra, Perico, and Flamenco, or other place in the bay where there may exist a permanent depth of water for large vessels.

ARTICLE V.

During the whole term of this privilege the company shall have the exclusive right to establish across the Isthmus of Panama within the zone indicated in Article II, any class of carriage roads whatever, from one ocean to the other. The Colombian Government binds

^a See section 1 of article 1 of the decree following.

^b See section 2 of article 1 of the decree.

^c See section 3 of article 1 of the decree.

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itself not to undertake for itself, nor to permit any other company or person to undertake within said zone any other carriage road, either macadamized, or of plank, or of any other class suitable for the use of wheeled vehicles, between the two oceans across the Isthmus of Panama. It being nevertheless well understood that the privilege of which this article treats can not and must not in any manner prevent the construction of any kind of roads in a direction distinct from that expressed, nor the completing, preserving, and improving of roads already existing, or which are actually being constructed on said Isthmus.

ARTICLE VI.

The company shall have the right for the whole term of this privilege—

First. To regulate and direct the use of the ports, embarking and disembarking places, wharves, anchorage grounds, etc., at the termini of the railroad, and to establish agents with powers to carry into effect the regulations that it may make in this particular in conformity with the laws of the Republic. These regulations shall be submitted to the approval of the executive power, without which they can not take effect. The executive power may refuse its approbation, alter, and revoke them as it may deem convenient.

Second. To use the embarking and disembarking places, wharves, etc., that it has constructed or may construct in the ports situated at the two extremes of the road.

Third. To use the landings necessary, and especially those designated for the storage and free deposit of all goods and merchandise admitted for transit over the Isthmus on the railroad constructed by the company. By virtue of this privilege the company may collect as compensation for the use of the line of communication, means of transportation, landings, warehouses, and establishments of all kinds belonging to it, such tolls for transporting, wharfage, storage, and labor as it may deem proper to establish.

ARTICLE VII.

The executive power shall determine the forms to be observed in the landing of goods on either ocean; and the intervention therein of the officers of the Republic to prevent the effects destined for transit from one ocean to the other from being left on the way or fraudulently introduced for internal consumption. Said precautions shall be such as may tend to prevent all frauds to the injury of the public revenue, without delaying or embarrassing the rapid dispatch and transit of passengers and packages of merchandise, luggage, and goods of all kinds which may be subjects of lawful commerce.

ARTICLE VIII.

The company may give to the actual railroad a different direction from that which it now has, and which it may deem most favorable to the enterprise, it being free to choose the points of departure and arrival which may appear to it most advantageous and most convenient for the entrance and anchorage of vessels, or for ports properly so-called, and for embarking places, dry docks, places for lighterage, landings, warehouses, stations, hotels, and establishments of all kinds, and this without prejudice to what is stipulated in Article IV of this contract.

ARTICLE IX.

The Government of the United States of Colombia ratifies the concession made to the Panama Railroad Company by the contract of the 15th of April, 1850:

First. Of the lands that it has required and that it may require for the establishment of the line of railway in its whole extent, provided such lands belong to the Government:

Second. Of the lands which were necessary for sea ports, dry docks, river ports, landings, embarking places, places for lighterage, warehouses, stations, hotels, and generally for all the necessities of the service of the railroad, always provided that such lands shall be the property of the Republic.

Third. Of the concession made by gratuitous title and in perpetuity of sixty-four thousand hectares of vacant lands in the territory of the State of Panama, with the exception of the islands in both oceans and of the districts which formed on the 1st of January, 1849, the territories of "Bocas del Toro" and of "Darien," limits of which were fixed by the law of the 9th of January, 1855. This concession may be extended to ninety-six thousand hectares, if there shall be that number disposable within the limits of the ancient provinces of Panama and Veraguas in such manner that the Government can adjudicate them as vacant lands; and the company shall have the right to select them in the continental part of said provinces as they may deem most convenient. But it is stipulated that in the lands which the company may select on the line of the road, and its vicinity, there shall positively be left regular intervals equivalent in extent to those (tracts) which shall be given to the company

in order that the Government may be enabled to make grants or sales of land for other establishments which may desire to locate themselves on the line and in the neighborhood of the road.

Paragraph. The lands granted to the company by sections first and second of this article shall be returned to the Republic at the expiration of the present privilege in the terms and with the formalities prescribed in this contract.

ARTICLE X.

In the grant of vacant lands in perpetuity made to the company by the contract of 1850 and ratified in section third of Article IX of this contract, there is not included the number of hectares contained in the Island of "Manzanillo" in the Bay of "Limon," but they are included in the grants treated of in the first and second sections of the article cited, with the exception of four hectares which the Government reserves as an area for the construction of buildings for public offices, schoolhouses, prison, and other objects of public use, which shall be delivered by the company properly graded and in condition for building upon them. But it is understood that in the designation by the Government of the place or places in which it desires to take the four hectares reserved to it by this article, it shall not choose those which may be necessary for the construction and service of the railway and its dependencies, nor those which may be already occupied by buildings now standing or which are to be reconstructed.

This selection may be made by the Government, in anticipation, as it may see fit, in accordance with the plan of the city, in order that the lands may be delivered to it so soon as the nature of the ground permits of the grading being carried on.

ARTICLE XI.^a

The lands conceded to the company by Article IX, section third, shall be delivered as may be requested on compliance with the legal formalities established for such cases, and it being incumbent on the company to prove their character as vacant lands, to measure them, and to make the respective plans.

The adjudication of said lands shall be made by the executive power, and from the time the declaration is made in the premises, they shall be considered definitely adjudicated to the company; but the provisional adjudication shall be made by the President of the State of Panama, submitted always to the examination and approval of the national executive power, and while not disapproved it will only produce the effect of preventing all ulterior grant of the same lands in favor of a third party. The Republic is not bound in any case to the vacating or guaranteeing the titles of the vacant lands which may be adjudicated to the company.

ARTICLE XII.^b

When the lands which may be required for the extension of the line of the railroad which is referred to in section fourth of Article 1 of this contract, or for changes in the direction of the line, or for the establishment of a second line of rails, are the property of private individuals, the company shall have the right to obtain them by order of the President of the State after a valuation and a just indemnification of the proprietor in conformity with the provisions of the law of the 22d of May, 1866, "concerning proceedings in civil cases cognizance of which belongs to the tribunals of the Union."

ARTICLE XIII.

The railroad enterprise is esteemed of public utility.

ARTICLE XIV.

The company is authorized to propose to the executive power, the regulations which it may judge proper for the police, security, and preservation of its ways of communication, ports, works, and establishments of all kinds; but such regulations shall not be put in force without the express approval of the executive power, which, even after having approved them, may amend or annul them as it may deem proper, proceeding always in conformity with the laws of the Republic.

^a See section 4, article 1, of decree.

^b See section 5, article 1, of decree.

ARTICLE XV.

The tariff of charges and freights on money, carriage of merchandise, and transport of travelers over the railroad, board and storage in the depots and establishments of the company, shall be fixed by it, and modified as it may deem best for its interests, but it shall be bound to inform the local authorities of said tariffs and modifications with at least thirty days' previous notice.

ARTICLE XVI.

The company binds itself to transport gratis over the railroad the national and State mails that may have to be carried from ocean to ocean or to any intermediate point; and it may make such pecuniary arrangements as it thinks proper for the transportation of foreign mails, the passage of which over the Isthmus is declared free to all nations; but the Government of the Republic may prohibit the passage by the railroad of the mails of those nations that may be at war with it, in which case the company shall refuse to carry them over the railroad.

ARTICLE XVII.

The company may freely introduce into the Isthmus without payment of duties or in costs of any kind all the implements, machines, tools, materials, provisions, and manufactured articles intended for the construction, working, and preservation of the railroad, and the provisioning of the workmen employed on it.

ARTICLE XVIII.

The company is exempt from paying taxes or contributions national, municipal of the State, or of any other kind, upon the railroad, its warehouses, wharves, machines or other works, things and effects of any kind belonging to it, and which, in the judgment of the executive power, are necessary for the service of the said railroad and its dependencies.

ARTICLE XIX.

In compensation for these exemptions the company binds itself to transport gratuitously and without the Government having to pay anything either for freight or for any other cause, the troops, chiefs and officers, and their equipage, ammunition, armament, clothing, and all similar effects that may belong to, are or may be destined for the immediate service of the Government of the Republic, or of the State of Panama, as also their officials in service or in commission, and those individuals who, with their families and baggage, may come to the country in the character of emigrants, and of new settlers with the permanent character of such, for account of the Government, up to the number of 2,000 annually. The executive power shall dictate the provisions as it may deem proper in such cases, in order to prevent those passengers whose entry into Colombian territory may be purely accidental, from availing themselves of this concession.

ARTICLE XX.^a

Colombian productions shall be transported by the railroad during the first twenty years of this contract, paying only one-half the rates of freight or transportation previously fixed by the company for foreign products of the same class; but this term being concluded, they shall continue to pay only a duty or freight one-third less than that fixed by the said tariff.

ARTICLE XXI.

Passengers, money, merchandise, objects and effects of all kinds, destined for interoceanic transit over the railroad, while they remain in the warehouses and depots of the company, or in its possession, are exempt from dues and taxes, national, municipal of the State, or of any other description. In like manner the vessels which may enter the ports at the termini of the railroad, as well as their officers, crews, and their agents, shall be exempt from the payment of tonnage dues or of any other tax or contribution whatever on account of service applied directly to the interoceanic transit.

^a See section 6, article 1, of decree.

ARTICLE XXII.

Travelers passing from one sea to the other over the railroad shall not require any passports to pass over it, excepting in cases of foreign war or internal commotion, when the Government may deem the presentation of passports expedient for the security of the country or the preservation of public order. Nevertheless, persons who have been expelled from the territory of the Republic, or other individuals whom the laws forbid an entrance into the country, shall not pass over the railroad.

ARTICLE XXIII.

In case the present privilege conceded to the company shall be declared forfeited by the competent tribunal, it shall return to the Republic such lands granted in ownership, and by gratuitous title, as may not be already transferred in fee to a third party, and it shall have no right to exact any indemnification for improvements, nor for any other cause.

ARTICLE XXIV.

It is obligatory upon the company to make a survey of the lands with notice to the owners of adjoining lands, and to make a topographical plan of the road with all its dependencies, such as bridges, aqueducts, viaducts, and other works, which it may have constructed for the service of the railroad, in order that by means of such plan it may be clearly known what the company holds in ownership, and to what purpose the exemptions provided for are destined.

ARTICLE XXV.

The company binds itself to execute constantly, with all care, punctuality, and celerity the transportation of the travelers, cattle, merchandise, goods, and materials of all kinds that may be confided to it, payment being made of the charges and prices of transportation that may be fixed in the respective tariff. The disposition of this article is nevertheless no obstacle at the company's entering into special contracts for the transportation of articles whose bulk, weight, or exceptional nature do not allow of their freights being fixed beforehand.

ARTICLE XXVI.

Vessels of nations which may be at war with the United States of Colombia shall not be admitted to the ports situated at either extremity of the railroad, nor shall the productions, effects, and property of such nations enjoy the free transit of the Isthmus over the said road.

ARTICLE XXVII.

It is obligatory upon the company to maintain constantly in Panama or Colon a representative with sufficient power and authority to treat, whenever it may be necessary, personally with the Government, on matters having relation to the enterprise.

ARTICLE XXVIII.^a

The present privilege cannot be ceded or transferred to any foreign government; that is, to any government existing outside of Colombian territory, under penalty of forfeiture of the said privilege by the mere act of attempting or verifying such cession or transfer; which act from the present moment is declared absolutely null and of no effect. This privilege shall also be forfeited in case the railroad company shall not execute the transportation during a period exceeding four consecutive months (fortuitous cases excepted).

ARTICLE XXIX.

In case of the forfeiture of this privilege from any cause, the ownership and full possession of the railroad with all its dependencies, appurtenances, and accessories shall pass to the Republic without the company's having thereby any right to indemnification or remuneration of any kind.

ARTICLE XXX.

The Government of the Republic binds itself to protect and maintain in all their integrity the rights of the company resulting from the present contract; provided the company complies punctually on its part with the duties and obligations which it undertakes, and that the privilege continues in force.

^a See section 7, article 1, of decree.

ARTICLE XXXI.^a

The right which said Republic reserved to itself by the contract of the 15th of April, 1850, to redeem the privilege of the company, being especially hypothecated as an additional security for the loan contracted by the Republic in London under date of the 1st of October, 1863, it is stipulated that the products from the railroad which by this contract belong to the Government remain subsidiarily applicable to the payment of the obligations of the Government of the Republic in regard to that loan, whether it be to complete the annual installments which the Government is obliged to pay in London on account of the interest and amortization of the capital or to redeem the bonds of the loan at par, if, in 1874, their redemption shall not have been completed, and the company, having given previous notice to the Government, can make the expressed application of the funds.

ARTICLE XXXII.

In consequence of the stipulation in article third, the Government renounces the benefit or participation of three per cent which by article fifty-five of the primitive contract it had in the net products of the enterprise, and the quota of five per cent which had also been reserved in its favor by article thirty of said contract, in the transportation of correspondence, and which quota it was stipulated should not be less than ten thousand dollars annually. The account of these profits shall be liquidated immediately in the terms fixed by article fifty-five up to the day on which the present contract begins to rule and have effect, and the payment of the balance which may result in favor of the Republic shall be made by the company in New York to the order of the Government.

ARTICLE XXXIII.^b

Questions that may arise between the Government of the Republic and the railroad company as to the understanding or the execution of this contract shall be decided in the capital of the Colombian Union by a tribunal of arbitrators composed of the president of the federal supreme court and a person named by the company, and of a third who shall be chosen by agreement of the two first arbitrators; and if these cannot agree in the selection, each of the said arbitrators shall indicate the person whom he would name as third, and the choice shall be decided by lot.

The arbitrators shall decide in case of defect or obscurity in the stipulations of this contract, in accordance with the principles of universal justice, and their decision shall be without appeal in any case. If the three arbitrators should not agree the votes of the two who do agree shall make the decision. The forms of proceeding which shall be followed by the arbitrators shall be those established by the judgments in legal arbitrations.

ARTICLE XXXIV.^c

If the company on being required to make the nomination to which it is entitled shall not do so within the sixty following days, or shall name any person who does not wish to, or cannot accept nor fulfil the commission, the company authorizes the actual representative of the United States of America to make the choice.

ARTICLE XXXV.^d

The ninety-nine years of the duration of the privilege which is conceded by this contract shall be counted from the 30th of January, 1875.

ARTICLE XXXVI.

At the expiration of the term of the privilege, and by the sole fact of its expiration, the Government of the Colombian Union shall be substituted in all the rights of the company, and shall enter immediately into the enjoyment of the line of communication, of all its fixtures, of all its dependencies, and of all its products. The company shall be bound to deliver to the Government, in good order, the roads, the works which compose them, and their dependencies, such as landing and discharging places, offices, machines, and in general whatever movable or immovable objects, whether destined for the especial service of transportation or applicable to any other object connected with the enterprise.

^a See section 8, article 1, of decree.
^b See section 9, article 1, of decree.

^c See section 10, article 1, of decree.
^d See section 11, article 1, of decree.

ARTICLE XXXVII.

The present contract contains all the concessions and privileges which the existing Panama Railroad Company has acquired for the future. In virtue of which it is declared, and the parties hereby expressly agree, that at no time can the company claim rights or privileges which are clearly not contained in this contract, unless they may be granted by subsequent acts.

ARTICLE XXXVIII.

The contract of the 15th of April, 1850, approved by the legislative decree of the 4th of June of the same year, is hereby reformed by the terms of the present contract; and, extended as it is in thirty-eight articles, it shall be submitted to the approval of the executive power of the Republic, and when obtained, it shall be presented to Congress, the consent of which is required in order that, being enacted into a law, it may be carried into effect.

In testimony whereof this present is extended in duplicate, sealed with the private seals of each party, and signed, after reading and comparison, in Bogota, this fifth day of July, eighteen hundred and sixty-seven.

JORJE GUTIERREZ DE LARA,

The Secretary of Finance and Public Improvements.

G. M. TOTTEN.

Bogota, July 5th, 1867.

Approved,

SANTOS ACOSTA.

JORJE GUTIERREZ DE LARA,

The Secretary of Finance and Public Improvements.

Decree of the Colombian Congress approving, with modifications, the contract between the United States of Colombia and the Panama Railroad Company.

[Translated from the Spanish by John W. Carrington, C. E.]

Decree approving the contract made on the 5th of July, 1867, "reforming that of the 15th of April, 1850, concerning the construction of a railroad from one ocean to the other, over the Isthmus of Panama."

The Congress of the United States of Colombia decrees:

ARTICLE I.

The contract made in Bogota on the 5th of July, 1867, between the secretary of finance and public improvements, Señor Jorje Gutiérrez de Lara, with approval of the executive power, and Mr. George M. Totten, general agent and attorney of the Panama Railroad Company, "reformative of that of the 15th of April, 1850, concerning the construction of a railroad from one ocean to the other, over the Isthmus of Panama," is approved, with the following modifications:

First. Article first, in these terms:

"Article I. The Government of the United States of Colombia concedes to the Panama Railroad Company the use and possession, for ninety-nine years, of the railroad constructed by it, and which actually exists between the cities of Colon and Panama. This concession comprises not only the road, but also the buildings, warehouses, wharves, dock yards, telegraph between Colon and Panama, belonging to the road, and in general all the dependencies and other works of which the said company is now in possession, necessary to the service and development of the enterprise, and those which in the future it may establish with the same purpose."

Second. Article second thus:

"Article II. The Government of the Republic binds itself, during the time that the exclusive privilege which is conceded to the company for the working of the railroad remains in force, not to construct for itself, nor to concede to any person or company, by any title whatever, the power to establish any other railroad on the Isthmus of Panama, and it also stipulates that, while the said privilege continues in force, the Government shall not have the power of undertaking for itself, nor permitting any person to undertake, without the concurrence and consent of said company, the opening or working of any maritime canal which may unite the two oceans across the said Isthmus of Panama to the west of the line of Cape Tiburon on the Atlantic and Point Garachiné on the Pacific. But it remains stipulated that the right which is conceded to the company to give its consent does not

extend to its opposing the construction of a canal across the Isthmus of Panama (except on the actual route of the railroad itself), but only to its exacting an equitable price for such a privilege and as indemnification for the damages which the railroad company may suffer by the rivalry or competition of the canal.

"If the sum which may be demanded by the company shall not appear equitable to the Government of the United States of Colombia, then it shall be fixed by arbitrators in New York or Panama, one to be named by the Government and the other by the company, and in case of their not agreeing the two shall name a third, whose decision shall be without appeal.

"In pronouncing their decision the arbitrators shall take into consideration the grounds upon which the company rests, and the information which the Government shall give upon the matter, and in view thereof they shall decide without appeal as they may deem most just and equitable.

"The sum, whatever it may be, which shall be finally designated, shall belong one-half to the railroad company and one-half to the Government of Colombia."

Third. Article third was approved thus:

"Article III. In compensation of and as a price for these concessions the railroad company binds itself to pay to the Government of the United States of Colombia one million of dollars in American gold, or in bills on New York payable in the same kind, as the Government may elect, on the day on which this contract shall be approved by Congress, and to pay from the present time, and until the expiration of the present privilege, an annual revenue of \$250,000 in American gold. The company will make the payments quarterly in New York to the agent designated by the Government of the United States of Colombia, or if the Government should desire the company will place the money in London or Panama, the Government giving the necessary notice to the company in New York. These quarterly payments shall commence to count from the date of the approval of this contract by Congress.

"From the revenue which the Government acquires by this contract there shall be set apart annually during twenty years twenty-five thousand dollars, which the company shall deliver to the Government of the state of Panama."

Fourth. Article eleventh remained thus:

"Article XI. The lands conceded to the company by article ninth, section third, shall be delivered as may be requested on compliance with the legal formalities established for such cases, and it being incumbent on the company to prove their character as vacant lands, to measure them, and to make the respective plans. The adjudication of said lands shall be made by the executive power, and from the time the declaration is made in the premises they shall be considered definitely adjudicated to the company; but the provisional adjudication shall be made by the President of the state of Panama, submitted always to the examination and approval of the national executive power, and while not disapproved it will only produce the effect of preventing any ulterior grant of the same lands in favor of a third party. The Republic is not bound in any case to the vacating and guaranteeing the title of the vacant lands which may be adjudicated to the company.

"The executive power will fix a time in agreement with the company within which the latter shall be bound to designate the vacant lands to which it has the right."

Fifth. Article twelfth was approved in this form:

"Article XII. When the lands which may be required for the extension of the line of the railroad, as referred to in article fourth of this contract, or for changes of direction of the line or for the establishment of a second line of rails, shall be the property of private individuals the company shall have the right to obtain them on an official appraisalment and the just indemnification of the proprietor in conformity with the dispositions of the law of the 22d of May, 1866, 'concerning the mode of proceeding in those civil cases, the cognizance of which appertains to the tribunals of the Union.'"

Sixth. Article twentieth thus:

"Article XX. Columbian productions shall be transported by the railroad during the first twenty years of this contract, paying only one-half the rates of freight or transportation previously fixed by the company for foreign products of the same class, but this term being concluded they shall pay a charge or freight not exceeding two-thirds of that previously fixed in the tariff of the company—tariff rates which the company can not increase in future in regard to Columbian productions."

Seventh. Article twenty-eighth in these terms:

"Article XXVIII. The present privilege can not be ceded or transferred to any foreign government—that is to say, to any government existing outside of Colombian territory—under pain of forfeiture of the said privilege by the mere act of attempting or verifying such cession or transfer, which act, from the present time, is declared absolutely null and of no value or effect. This privilege shall also be forfeited in case the railroad company shall not execute the transportation during a period exceeding four consecutive months (fortuitous cases excepted).

"This privilege will also be forfeited by the failure of payment, after being one year overdue, of any of the quarterly payments. Delay in the payments for a less period subjects the company to the payment of interest at the rate of seven per cent per annum."

Eighth. Article thirty-first remains as follows:

"Article XXXI. The right which said Republic reserved to itself by the contract of the 15th of April, 1850, to redeem the privilege of the company, being especially hypothecated as an additional security for the loan contracted by the said Republic in London under date of the 1st of October, 1863, it is stipulated that the products from the railroad, which by this contract belong to the Government, remain subsidiarily applicable to the payment of the obligations of the Government of the Republic, in regard to that loan, whether it be to complete the annual instalments which the Government is obliged to pay in London on account of the interest and amortization of the capital, or to redeem the bonds of the loan at par, if in 1874 their redemption shall not have been completed."

Ninth. Article thirty-third in this form:

"Article XXXIII. Questions which may arise between the Government of the Republic and the railroad company concerning the understanding or the fulfillment of this contract shall be decided by the courts and tribunals of the Colombian Union according to the constitution and laws of the Republic."

Tenth. Article thirty-fourth of the contract was negatived.

Eleventh. Article thirty-fifth was approved in this form:

"Article XXXV. The ninety-nine years of the duration of the privilege conceded by this contract shall be counted from the date on which it may be approved by the Congress."

ARTICLE II.

The executive power is authorized, in case that Mr. G. M. Totten, as attorney of the Panama Railroad Company, should not accept the contract to which this decree refers, in the terms of the present legislative act, to make it with any other person or company, after soliciting tenders, and the basis fixed by the approval of said contract serving as a minimum; it being always understood, on the other hand, that its fulfillment shall be assured by the necessary guarantees.

The executive power may make use of this authorization within the term of six months, counting from the date of the sanction of this decree.

Given in Bogota the 15th day of August, one thousand eight hundred and sixty-seven.

The president of the senate of plenipotentiaries, Pedro Cortés Holguin; the president of the chamber of representatives, M. Plata Azuero; the secretary of the senate of plenipotentiaries, Enrique Cortés; the secretary of the chamber of representatives, Francisco A. Vela.

BOGOTA, August 16, 1867.

Let it be published and carried into effect.

[L. s.]

SANTOS ACOSTA.

JORJE GUTIÉRREZ DE LARA,

The Secretary of Finance and Public Improvements.

OFFICE OF FINANCE AND PUBLIC IMPROVEMENTS,

Bogota, August 16, 1867.

A true copy.

JORJE GUTIÉRREZ DE LARA.

EXHIBIT E 3.

Contract between the United States of Colombia and the Panama Railroad Company, made in 1827, as modified by the contracts made in 1876 and 1880, and by amendments of August 18th, 1891.

Contract reformative of that of 15th April, 1850, concerning the construction of a railroad from one ocean to the other, across the Isthmus of Panama.

The secretary of finance and public improvements of the United States of Colombia, duly authorized by the executive power, on the one part, and on the other George M. Totten, engineer in chief and general agent of the Panama Railroad Company, with full power and authority from the directors of said company, having in consideration the stipulation in Article II of the contract made with said company, and approved by the legislature decree of the 4th of June, 1850, and desiring to provide whatever may be needful for the perfection of the work of the said railroad, in order that it may better answer the necessities of the commerce of the world and at the same time furnish a sure and permanent revenue to the treasury of the Republic, have agreed to modify and re-form the said contract in the terms set forth in the following stipulations:

ARTICLE I.

The Government of the United States of Colombia concedes to the Panama Railroad Company the use and possession, for ninety-nine years, of the railroad constructed by it and which actually exists between the cities of Colon and Panama. This concession comprises not only the road, but also the buildings, warehouses, wharves, dock yards, telegraph between Colon and Panama, belonging to the road, and in general all the dependencies and other works of which the said company is now in possession, necessary to the service and development of the enterprise, and those which in the future it may establish with the same purpose.

ARTICLE II.

The Government of the Republic binds itself, during the time that the exclusive privilege which is conceded to the company for the working of the railroad remains in force, not to construct for itself, nor to concede to any person or company, by any title whatever, the power to establish any other railroad on the Isthmus of Panama and it also stipulates that while the said privilege continues in force the Government shall not have the power of undertaking for itself, nor permitting any person to undertake, without the concurrence and consent of said company, the opening or working of any maritime canal which may unite the two oceans across the said Isthmus of Panama to the west of the line of Cape Tiburon on the Atlantic and Point Garachiné on the Pacific. But it remains stipulated that the right which is conceded to the company to give its consent does not extend to its opposing the construction of a canal across the Isthmus of Panama (except on the actual route of the railroad itself) but only to its exacting an equitable price for such privilege, and as indemnification for the damages which the railroad company may suffer by the rivalry or competition of the canal.

If the sum which may be demanded by the company shall not appear equitable to the Government of the United States of Colombia, then it shall be fixed by arbitrators in New York or Panama, one to be named by the Government and the other by the company, and in case of their not agreeing the two shall name a third, whose decision shall be without appeal.

In pronouncing their decision the arbitrators shall take into consideration the grounds upon which the company rests, and the information which the Government shall give upon the matter, and in view thereof they shall decide without appeal as they may deem most just and equitable.

The sum, whatever it may be, which shall be finally designated, shall belong one-half to the railroad company and one-half to the Government of Colombia.

ARTICLE III.

In compensation of and as a price for these concessions, the railroad company binds itself to pay to the Government of the United States of Colombia one million of dollars in American gold, or in bills on New York payable in the same kind, as the Government may elect, on the day on which this contract shall be approved by Congress, and to pay from the present time and until the expiration of the present privilege an annual revenue of \$250,000 ^a in American gold. The company will make the payments quarterly in New York to the agent designated by the Government of the United States of Colombia, or if the Government should desire, the company will place the money in London or Panama, the Government giving the necessary notice to the company in New York. These quarterly payments shall commence to count from the date of the approval of this contract by Congress.

From the revenue which the Government acquires by this contract there shall be set apart annually during twenty years twenty-five thousand dollars, which the company shall deliver to the government of the State of Panama.

ARTICLE IV.

The company binds itself to extend the railroad on the Pacific side to the islands of Naos, Culebra, Perico, and Flamenco, or other place in the bay where there may exist a permanent depth of water for large vessels.

Whereas a certain contract was made between the Government of the United States of Colombia and the Panama Railroad Company, dated the fifth day of July, one thousand eight hundred and sixty-seven, in abrogation of and to take the place of another contract between the same parties of the fifteenth day of April, one thousand eight hundred and fifty, which first-mentioned contract was afterwards approved by the said Government, by legis-

^a NOTE.—\$225,000 of this annual sum was advanced and paid by the company to the Colombian Government in November, 1890, for the full period intervening up to March 27, 1903.

lative decree, on the sixteenth day of August, one thousand eight hundred and sixty-seven, with certain modifications, which modifications were accepted by the said railroad company; and whereas it was stipulated by the said new contract, by Article IV of the same, that the said railroad company should extend its railway to the islands of Naos, Culebra, Perico, and Flamenco, or any other place in the Bay of Panama where a permanent anchorage may be found for large vessels, as by reference to said contract will more fully and precisely appear;

And whereas the said railroad company has not yet completed the said work, and denies any present obligation to proceed with the same: and whereas the Congress of the United States of Colombia, on the twenty-sixth day of July, one thousand eight hundred and eighty, by an act passed on that day, authorized the executive power of the said United States of Colombia to enter into negotiations with the Panama Railroad Company, in order to declare it liberated from the obligations it assumed by the aforesaid Article IV of the contract made on the sixteenth day of August, one thousand eight hundred and sixty-seven, for the extension of the said railway in the harbor of Panama as aforesaid, by which act a sum of money was to be paid to the said Republic of the United States of Colombia sufficient, in the judgment of the executive power of the said government, to compensate for the release from the said article as aforesaid;

And whereas the national executive power of the said Government has appointed Mr. Solomon Koppel as its agent and attorney for the purpose of negotiating with the said railroad company for the abrogation of the said Article IV, and has given to him full, complete, and absolute power to enter into, carry out, and conclude, in the name of the Government of the United States of Colombia, the negotiations for the purpose of abrogating the aforesaid Article IV of the said contract;

And whereas the Chief Executive of the said Republic of the United States of Colombia has exercised the discretion conferred upon him by the aforesaid act of Congress by the issue to the said Solomon Koppel of instructions by which the said Solomon Koppel, as such agent and attorney of the Government of the United States of Colombia as aforesaid, is directed to negotiate only for an exemption or abrogation of the aforesaid Article IV for a period of not exceeding thirty consecutive years, and has further exercised the aforesaid discretion and authority conferred by the said act of Congress by fixing the amount to be paid by the Panama Railroad Company for the abrogation of the said Article IV, and which, by the aforesaid written instructions, is limited to the sum of ten thousand dollars per annum for each of the years during which the said Article IV is suspended or abrogated.

And whereas the said Solomon Koppel is now in the city of New York, and has had a negotiation with the Panama Railroad Company touching the matters aforesaid, and has agreed with the said company to the suspension of the said Article IV for the full period of thirty years from the first day of November, one thousand eight hundred and eighty, upon condition that the said company should pay to the said Government of the United States of Colombia the full sum of ten thousand dollars per annum for each of the said thirty years, making an aggregate payment to the said Government for the suspension and abrogation aforesaid of three hundred thousand dollars in American gold, in all of which actings and doings the said Solomon Koppel has complied exactly with the written instructions of the said Chief Executive of the United States of Colombia as the same were communicated to him, and as the same have been handed by him to the Panama Railroad Company;

Now, therefore, this agreement witnesseth that, in consideration of the premises and for the aforesaid sum of three hundred thousand dollars in gold coin, payable at the rate of ten thousand dollars in each year from the execution hereof by the Panama Railroad Company to the United States of Colombia, the said Government has fully exonerated, released, and discharged, and does hereby fully exonerate, release, and discharge the said Panama Railroad Company from all its obligations of every nature whatever arising upon or growing out of the aforesaid Article IV of the contract of the fifth day of July, one thousand eight hundred and sixty-seven, by which article the said company was bound to extend its railroad on the Pacific side, as is provided in and by the said contract, to which special reference is hereby made, and the said contract, in so far as concerns the extension of the said railroad into the Bay of Panama aforesaid, is hereby, in accordance with the full power granted to the Chief Executive of the said Government by the Congress of the United States of Colombia, abrogated and annulled. But this abrogation, suspension, and annulment of the said Article IV shall continue only for the period of thirty years from and after the first day of November, in the year one thousand eight hundred and eighty, and at the expiration of the said term of thirty years the said Article IV of the said original contract of the fifth day of July, one thousand eight hundred and sixty-seven, shall again be revived, and shall be and remain thereafter in force and effect as the same now exists. And the said Panama Railroad Company, in consideration of the aforesaid suspension, release, and abrogation of the said Article IV for the term and period as aforesaid, hereby agrees to pay to the said Government of the United States of Colombia the just and full sum of three hundred thousand dollars in gold coin, as follows, viz, the sum of ten thousand dollars on the first day of November in each and every year, payable in the city of New York, during the said term of thirty years,

the first of said annual installments to be payable on the first day of November, which will be in the year one thousand eight hundred and eighty-one, and on each first day of November thereafter until the whole sum of three hundred thousand dollars shall have been paid. And it is further provided and agreed that in case the said Panama Railroad Company, or its successors, shall determine to extend its said line of railway to the islands in the Bay of Panama or to deep water, in accordance with the terms of said Article IV as originally agreed, and shall actually construct the same, that then and from thenceforward the annual payment of ten thousand dollars for each of said thirty years shall cease for the remainder of said term then unexpired, anything herein contained to the contrary in anywise notwithstanding; but this termination of said annual payments shall not take effect until the expiration of six months after said Panama Railroad Company shall have given notice to the Government of the United States of Colombia of the actual completion of said extended line in the Bay of Panama as aforesaid.—[Contract of 1880.]

ARTICLE V.

During the whole term of this privilege, the company shall have exclusive right to establish across the Isthmus of Panama, within the zone indicated in article second, any class of carriage roads whatever, from one ocean to the other. The Colombian Government binds itself not to undertake for itself, nor to permit any other company or person to undertake within said zone any other carriage road, either macadamized, or of plank, or of any other class suitable for the use of wheeled vehicles, between the two oceans across the Isthmus of Panama. It being, nevertheless, well understood that the privilege of which this article treats can not and must not in any manner prevent the construction of any kind of roads in a direction distinct from that expressed, nor the completing, preserving, and improving of roads already existing, or which are actually being constructed, on said Isthmus.

ARTICLE VI.

The company shall have the right for the whole term of this privilege:

First. To regulate and direct the use of the ports, embarking and disembarking places, wharves, anchorage grounds, etc., at the termini of the railroad, and to establish agents with powers to carry into effect the regulations that it may make in this particular in conformity with the laws of the Republic. These regulations shall be submitted to the approval of the executive power, without which they can not take effect. The executive power may refuse its approbation, alter and revoke them as it may deem convenient.

Second. To use the embarking and disembarking places, wharves, etc., that it has constructed or may construct in the ports situated at the two extremes of the road.

Third. To use the landings necessary, and especially those designated for the storage and free deposit of all goods and merchandise admitted for transit over the Isthmus on the railroad constructed by the company. By virtue of this privilege the company may collect as compensation for the use of the line of communication, means of transportation, landings, warehouses, and establishments of all kinds belonging to it, such tolls for transporting, wharfage, storage, and labor as it may deem proper to establish.

The company continues in the exercise of all the rights conceded to it in the 6th article of the contract of 5th of July, 1867. Consequently it may regulate and direct the use of the ports, embarking and disembarking places, wharves, anchorage grounds, etc., at the termini of the railroad, and establish agents with powers to carry into effect the regulations that it may make in this particular in conformity with the laws of the Republic. These regulations shall be submitted to the approval of the executive power, without which they can not take effect; but the executive power, after having once approved them, can not change them nor revoke them without the consent of the company.—[Art. I of contract of 1876.]

ARTICLE VII.

The executive power shall determine the forms to be observed in the landing of goods on either ocean, and the intervention therein of the officers of the Republic to prevent the effects destined for transit from one ocean to the other from being left on the way or fraudulently introduced for internal consumption. Said precautions shall be such as may tend to prevent all frauds to the injury of the public revenue, without delaying or embarrassing the rapid dispatch and transit of passengers and packages of merchandise, luggage, and goods of all kinds which may be subjects of lawful commerce.

ARTICLE VIII.

The company may give to the actual railroad a different direction from that which it now has, and which it may deem most favorable to the enterprise, it being free to choose the

points of departure and arrival which may appear to it most advantageous and most convenient for the entrance and anchorage of vessels, or for ports properly so called, and for embarking places, dry docks, places for lighterage, landings, warehouses, stations, hotels, and establishments of all kinds, and this without prejudice to what is stipulated in article fourth of this contract.

ARTICLE IX.

The Government of the United States of Colombia ratifies the concession made to the Panama Railroad Company by the contract of the 15th of April, 1850:

First. Of the lands that it has required and that it may require for the establishment of the line of railway in its whole extent, provided such lands belong to the Government.

Second. Of the lands which were necessary for sea ports, dry docks, river ports, landings, embarking places, places for lighterage, warehouses, stations, hotels, and generally for all the necessities of the service of the railroad, always provided that such lands shall be the property of the Republic.

Third. Of the concession made by gratuitous title and in perpetuity of sixty-four thousand hectares of vacant lands in the territory of the State of Panama, with exception of the islands in both oceans and of the districts which formed on the 1st of January, 1849, the territories of "Bocas del Toro" and of "Darien," limits of which were fixed by the law of the 9th of January, 1855. This concession may be extended to ninety-six thousand hectares, if there shall be that number disposable within the limits of the ancient provinces of Panama and Veraguas in such manner that the Government can adjudicate them as vacant lands; and the company shall have the right to select them in the continental part of said provinces as they may deem most convenient. But it is stipulated that in the lands which the company may select on the line of road and its vicinity there shall positively be left regular intervals equivalent in extent to those (tracts) which shall be given to the company, in order that the Government may be enabled to make grants or sales of land for other establishments which may desire to locate themselves on the line and in the neighborhood of the road.

Paragraph. The lands granted to the company by sections first and second of this article shall be returned to the Republic at the expiration of the present privilege in the terms and with the formalities prescribed in this contract.

ARTICLE X.

In the grant of vacant lands in perpetuity made to the company by the contract of 1850 and ratified in section third of Article IX of this contract there is not included the number of hectares contained in the island of "Manzanillo," in the Bay of "Limon," but they are included in the grants treated of in the first and second sections of the article cited, with the exception of four hectares, which the Government reserves as an area for the construction of buildings for public offices, schoolhouses, prison, and other objects of public use, which shall be delivered by the company properly graded and in condition for building upon them. But it is understood that in the designation by the Government of the place or places in which it desires to take the four hectares reserved to it by this article it shall not choose those which may be necessary for the construction and service of the railway and its dependencies, nor those which may be already occupied by buildings now standing or which are to be reconstructed.

This selection may be made by the Government in anticipation, as it may see fit, in accordance with the plan of the city, in order that the lands may be delivered to it so soon as the nature of the ground permits of the grading being carried on.

ARTICLE XI.

The lands conceded to the company by article ninth, section third, shall be delivered as may be requested on compliance with the legal formalities established for such cases, and it being incumbent on the company to prove their character as vacant lands, to measure them, and to make the respective plans. The adjudication of said lands shall be made by the executive power, and from the time the declaration is made in the premises they shall be considered definitely adjudicated to the company; but the provisional adjudication shall be made by the president of the State of Panama, submitted always to the examination and approval of the national executive power, and while not disapproved it will only produce the effect of preventing any ulterior grant of the same lands in favor of a third party. The Republic is not bound in any case to the vacating and guaranteeing the title of the vacant lands which may be adjudicated to the company.

The executive power will fix a time in agreement with the company within which the latter shall be bound to designate the vacant lands to which it has the right.

ARTICLE XII.

When the lands which may be required for the extension of the line of the railroad, as referred to in article fourth of this contract, or for changes of direction of the line, or for the establishment of a second line of rails, shall be the property of private individuals, the company shall have the right to obtain them on an official appraisement and the just indemnification of the proprietor, in conformity with the dispositions of the law of the 22d of May, 1860, "concerning the mode of proceeding in those civil cases, the cognizance of which appertains to the tribunals of the Union."

ARTICLE XIII.

The railroad enterprise is esteemed of public utility.

ARTICLE XIV.

The company is authorized to propose to the executive power the regulations which it may judge proper for the police, security, and preservation of its ways of communication, ports, works, and establishments of all kinds; but such regulations shall not be put in force without the express approval of the executive power, which even after having approved them may amend or annul them as it may deem proper, proceeding always in conformity with the laws of the Republic.

The company continues authorized to propose to the executive power the regulations which it may judge proper for the police, security and preservation of its ways of communication, ports, works, and establishments of all kinds.

Such regulations shall not be carried into effect without the express approval of the executive power; but the latter, after having approved them, can not change them nor annul them without the consent of the company.—[Art. II of contract of 1876.]

ARTICLE XV.

The tariff of charges and freights on money, carriage of merchandise, and transport of travelers over the railroad, board and storage in the depots and establishments of the company, shall be fixed by it, and modified as it may deem best for its interests, but it shall be bound to inform the local authorities of said tariffs and modifications with at least thirty days' previous notice.

ARTICLE XVI.

The company binds itself to transport gratis over the railroad the national and State mails that may have to be carried from ocean to ocean or to any intermediate point, and it may make such pecuniary arrangements as it thinks proper for the transportation of foreign mails, the passage of which over the Isthmus is declared free to all nations; but the Government of the Republic may prohibit the passage by the railroad of the mails of those nations that may be at war with it, in which case the company shall refuse to carry them over the railroad.

ARTICLE XVII.

The company may freely introduce into the Isthmus without payment of duties or imposts of any kind all the implements, machines, tools, materials, provisions, and manufactured articles intended for the construction, working, and preservation of the railroad, and the provisioning of the workmen employed on it.

ARTICLE XVIII.

The company is exempt from paying taxes or contributions national, municipal, of the State, or of any other kind upon the railroad, its warehouses, wharves, machines, or other works, things, and effects of any kind belonging to it, and which, in the judgment of the executive power, are necessary for the service of the said railroad and its dependencies.

ARTICLE XIX.

In compensation for these exemptions the company binds itself to transport gratuitously and without the Government having to pay anything either for freight or for any other cause, the troops, chiefs and officers and their equipage, ammunition, armament, clothing, and all similar effects that may belong to, are, or may be destined for the immediate service of the Government of the Republic or of the State of Panama, as also their officials in service or in commission, and those individuals who, with their families and baggage, may

come to the country in the character of emigrants, and of new settlers, with the permanent character of such, for account of the Government, up to the number of 2,000 annually. The executive power shall dictate the provisions as it may deem proper in such cases, in order to prevent those passengers whose entry into Colombian territory may be purely accidental from availing themselves of this concession.

The executive power of the Union shall dictate the provisions which may be necessary, at the request of the company, to prevent abuses in the gratuitous passage which Article XIX of the aforesaid contract concedes to national employees and those of the State of Panama.—[Art. IV of contract of 1876.]

ARTICLE XX.

Colombian productions shall be transported by the railroad during the first twenty years of this contract, paying only one-half the rates of freight or transportation previously fixed by the company for foreign products of the same class, but this term being concluded they shall pay a charge or freight not exceeding two-thirds of that previously fixed in the tariff of the company—tariff rates which the company can not increase in future in regard to Colombian productions.

(See amendments of August 18, 1891.)

In order that Colombian products may be transported by the railroad under the conditions of Article XX of the same contract there must precede a declaration of the shipper, duly attested by the bill of lading of shipment, with a certificate of the administrator of the national treasury at the port of shipment, or other similar document, at the time of offering them, that such products are really Colombian—a necessary condition, without which there shall be no ground for any claim.—[Art. V of contract of 1876.]

ARTICLE XXI.

Passengers, money, merchandise, objects, and effects of all kinds destined for inter-oceanic transit over the railroad, while they remain in the warehouses and depots of the company or in its possession, are exempt from dues and taxes, national, municipal, of the State, or of any other description. In like manner the vessels which may enter the ports at the termini of the railroad, as well as their officers, crews, and their agents, shall be exempt from the payment of tonnage dues or of any other tax or contribution whatever on account of service applied directly to the interoceanic transit.

ARTICLE XXII.

Travelers passing from one sea to the other over the railroad shall not require any passports to pass over it, excepting in cases of foreign war or internal commotion, when the Government may deem the presentation of passports expedient for the security of the country or the preservation of public order. Nevertheless, persons who have been expelled from the territory of the Republic, or other individuals whom the laws forbid an entrance into the country, shall not pass over the railroad.

ARTICLE XXIII.

In case the present privilege conceded to the company shall be declared forfeited by the competent tribunal, it shall return to the Republic such lands granted in ownership and by gratuitous title as may not be already transferred in fee to a third party, and it shall have no right to exact any indemnification for improvements, nor for any other cause.

ARTICLE XXIV.

It is obligatory upon the company to make a survey of the lands, with notice to the owners of adjoining lands, and to make a topographical plan of the road, with all its dependencies, such as bridges, aqueducts, viaducts, and other works which it may have constructed for the service of the railroad, in order that by means of such plan it may be clearly known what the company holds in ownership and to what purpose the exemptions provided for are destined.

ARTICLE XXV.

The company binds itself to execute constantly, with all care, punctuality, and celerity, the transportation of the travelers, cattle, merchandise, goods, and materials of all kinds that may be confided to it, payment being made of the charges and prices of transportation that may be fixed in the respective tariff. The disposition of this article is, neverthe-

less, no obstacle to the company's entering into special contracts for the transportation of articles whose bulk, weight, or exceptional nature do not allow of their freights being fixed beforehand.

The provision of the final part of Article XXV of the aforesaid contract of 1867, by which the company was permitted to enter into special contracts for the transportation of articles whose bulk, weight, or exceptional nature would not allow of their freights being fixed beforehand, is made applicable to all kinds of articles of commerce.—[Art. III of contract of 1876.]

ARTICLE XXVI.

Vessels of nations which may be at war with the United States of Colombia shall not be admitted to the ports situated at either extremity of the railroad, nor shall the productions, effects, and property of such nations enjoy the free transit of the Isthmus over the said road.

ARTICLE XXVII.

It is obligatory upon the company to maintain constantly in Panama or Colon a representative with sufficient power and authority to treat, whenever it may be necessary, personally with the Government on matters having relation to the enterprise.

ARTICLE XXVIII.

The present privilege can not be ceded or transferred to any foreign government—that is to say, to any government existing outside of Colombian territory—under pain of forfeiture of the said privilege by the mere act of attempting or verifying such cession or transfer, which act from the present time is declared absolutely null and of no value or effect. This privilege shall also be forfeited in case the railroad company shall not execute the transportation during a period exceeding four consecutive months (fortuitous cases excepted).

This privilege will also be forfeited by the failure of payment, after being one year overdue, of any of the quarterly payments. Delay in the payments for a less period subjects the company to the payment of interest at the rate of seven per cent per annum.

None of the cases of forfeiture of the privilege fixed in Article XXVIII shall go into effect until the resolution of the Government in which the declaration of forfeiture is made is served in due form, and at least three months in advance, on the company and on the agents of the persons to whom the Government may transfer or hypothecate the revenue to which it is entitled by Article III, if said transfer or hypothecation shall have taken place; it being understood that if, after the notification has been given, and during the aforesaid three months, the company or the interested persons of whom mention has been made shall satisfy the Government, causing the reason for complaint or forfeiture to disappear, the said declaration shall not be carried into effect.—[Art. VI of contract of 1876.]

The Government reserves to itself the right to hypothecate, in whole or in part, the revenue of which mention has been made in Article VI of this contract (except the right of the State of Panama to the annual proportion of \$25,000), before the time at which said revenue is to be paid, and whatever may be hypothecated shall be payable in such a manner as the Government may direct; and the railroad company binds itself, on being notified of any transfer or hypothecation, to accept it and to make payment at the maturity of the instalments to the persons or parties in whose favor the transfer or hypothecation may have been made.—[Art. VIII of contract of 1876.]

ARTICLE XXIX.

In case of the forfeiture of this privilege from any cause, the ownership and full possession of the railroad, with all its dependencies, appurtenances, and accessories, shall pass to the Republic without the company's having thereby any right to indemnification or remuneration of any kind.

ARTICLE XXX.

The Government of the Republic binds itself to protect and maintain in all their integrity the rights of the company resulting from the present contract, provided the company complies punctually on its part with the duties and obligations which it undertakes, and that the privilege continues in force.

ARTICLE XXXI.

The right which said Republic reserved to itself by the contract of the 15th of April, 1850, to redeem the privilege of the company, being especially hypothecated as an additional security for the loan contracted by the said Republic in London under date of the 1st

of October, 1863, it is stipulated that the products from the railroad which by this contract belong to the Government remain subsidiarily applicable to the payment of the obligations of the Government of the Republic in regard to that loan, whether it be to complete the annual installments which the Government is obliged to pay in London on account of the interest and amortization of the capital or to redeem the bonds of the loan at par, if in 1874 their redemption shall not have been completed.

ARTICLE XXXII.

In consequence of the stipulation in article third, the Government renounces the benefit or participation of three per cent which by article fifty-five of the primitive contract it had in the net products of the enterprise, and the quota of five per cent, which had also been reserved in its favor by article thirty of said contract in the transportation of correspondence, and which quota it was stipulated should not be less than ten thousand dollars annually. The account of these profits shall be liquidated immediately in the terms fixed by article fifty-five, up to the day on which the present contract begins to rule and have effect, and the payment of the balance which may result in favor of the Republic shall be made by the company in New York to the order of the Government.

ARTICLE XXXIII.

Questions which may arise between the Government of the Republic and the railroad company concerning the understanding or the fulfillment of this contract shall be decided by the courts and tribunals of the Colombian Union according to the constitution and laws of the Republic.

ARTICLE XXXIV.

Questions that may arise between the Government of the Republic and the railroad company as to the understanding or the execution of this contract and of those of 1850 and 1867, to which this one refers, shall be decided without appeal by the federal supreme court of the Colombian Union, without the intervention of any other tribunal.—[Art. VII of contract of 1876.]

ARTICLE XXXV.

The ninety-nine years of the duration of the privilege conceded by this contract shall be counted from the date on which it may be approved by the Congress.^a

ARTICLE XXXVI.

At the expiration of the term of the privilege, and by the sole fact of its expiration, the Government of the Colombian Union shall be substituted in all the rights of the company, and shall enter immediately into the enjoyment of the line of communication, of all its fixtures, of all its dependencies, and of all its products. The company shall be bound to deliver to the Government, in good order, the roads, the works which compose them, and their dependencies, such as landing and discharging places, offices, machines, and in general whatever movable or immovable objects, whether destined for the especial service of transportation or applicable to any other object connected with the enterprise.

ARTICLE XXXVII.

The present contract contains all the concessions and privileges which the existing Panama Railroad Company has acquired for the future. In virtue of which it is declared, and the parties hereby expressly agree, that at no time can the company claim rights or privileges which are clearly not contained in this contract, unless they may be granted by subsequent acts.

ARTICLE XXXVIII.

The contract of the 15th of April, 1850, approved by the legislative decree of the 4th of June of the same year, is hereby reformed by the terms of the present contract; and extended as it is in thirty-eight articles, it shall be submitted to the approval of the executive power of the Republic, and, when obtained, it shall be presented to Congress, the consent of which is required in order that, being enacted into a law, it may be carried into effect.^b

^a Which was August 16, 1867.

^b Congress approved, August 16, 1867.

Amendments agreed upon between the Panama Railroad Company and the Republic of Colombia, August 18th, 1891.

ARTICLE I.

Article twenty of the contract of July 5th, 1867, approved by law No. 46 of the same year, shall read as follows:

From and after July 1st, 1892, Colombian products passing over the Panama Railroad shall pay only half of the rate of freight established by the company for foreign products of the same class.

ARTICLE II.

Salt from the Colombian salt pits of the Atlantic coast intended for the national ports of the Pacific shall be transported by the same railroad company at the following rates:

A quantity not exceeding six million of kilograms each year, and which shall in no case exceed 1,000 tons per month, at the rate of two dollars (\$2) gold per ton without any deduction. Shipments of the salt referred to that may exceed the quantity above stated shall pay the rate that is established for the other Colombian products in the previous article.

EXHIBIT F.

EXHIBIT F 1.

List of dividends on capital stock of the Panama Railroad Company.

[Dividends on the capital stock outstanding were declared and paid as under.]

Year.	Capital stock.	Rate.	Amount paid.	Total paid.
		<i>Per cent.</i>		
1853.....	\$1,467,720.00	10	a \$146,772.00	
1853.....	2,194,062.00	5	109,703.10	\$256,475.10
1854.....	2,716,572.00	3½	95,080.02	
1854.....	2,832,000.00	3½	99,120.00	194,200.02
1855.....	2,875,000.00	3½	100,625.00	
1855.....	3,743,000.00	6	224,580.00	325,205.00
1856.....	4,532,000.00	6	271,920.00	
1856.....	4,717,000.00	6	283,020.00	554,940.00
1857.....	4,750,000.00	6	285,000.00	
1857.....	4,777,000.00	6	286,620.00	571,620.00
1858.....	4,840,000.00	6	290,400.00	
1858.....	4,923,000.00	6	295,380.00	585,780.00
1859.....	4,967,000.00	12	298,040.00	597,120.00
1860.....	4,973,000.00	6	298,380.00	
1860.....	4,976,000.00	6	298,560.00	596,940.00
1861.....	4,976,000.00	12	298,860.00	597,120.00
1862.....	4,981,000.00	6	298,860.00	
1862.....	4,990,000.00	11	548,900.00	847,760.00
1863.....	4,992,000.00	4	199,680.00	
1863.....	4,999,000.00	12	599,880.00	799,560.00
1864.....	5,000,000.00	20	1,000,000.00	1,000,000.00
1865.....	5,000,000.00	55	b 2,750,000.00	
1865.....	7,000,000.00	6	420,000.00	3,170,000.00
1866.....	7,000,000.00	24	1,680,000.00	1,680,000.00
1867.....	7,000,000.00	24	1,680,000.00	1,680,000.00
1868.....	7,000,000.00	44	3,080,000.00	3,080,000.00
1869.....	7,000,000.00	26	1,820,000.00	1,820,000.00
1870.....	7,000,000.00	12½	875,000.00	875,000.00
1871.....	7,000,000.00	3	210,000.00	210,000.00
1872.....	7,000,000.00	10½	735,000.00	735,000.00
1873.....	7,000,000.00	12	840,000.00	840,000.00
1874.....	7,000,000.00	12	840,000.00	840,000.00

a This was a stock dividend.

b Of this, \$2,000,000 represented a dividend of 40 per cent paid in stock.

List of dividends on capital stock of the Panama Railroad Company—Continued.

Year.	Capital stock.	Rate.	Amount paid.	Total paid.
		<i>Per cent.</i>		
1875.....	\$7,000,000.00	12		\$840,000.00
1876.....	7,000,000.00	9		630,000.00
1877.....	7,000,000.00	12		840,000.00
1878.....	7,000,000.00	12		840,000.00
1879.....	7,000,000.00	13		910,000.00
1880.....	7,000,000.00	16		1,120,000.00
1881.....	7,000,000.00	22 ^a		1,540,000.00
1882.....	7,000,000.00	12 ^a		840,000.00
1883.....	7,000,000.00	21 ^a		1,470,000.00
1884.....	7,000,000.00	16		1,120,000.00
1885.....	7,000,000.00	2		140,000.00
1888.....	7,000,000.00	23		1,610,000.00
1889.....	7,000,000.00	9		630,000.00
1890.....	7,000,000.00	5		350,000.00
1891.....	7,000,000.00	5		350,000.00
1892.....	7,000,000.00	4		280,000.00
1901.....	7,000,000.00	2		140,000.00
1902.....	7,000,000.00	4		280,000.00
1903.....	7,000,000.00	4		280,000.00
1904.....	7,000,000.00	6 ¹ / ₂		455,000.00
1905.....	7,000,000.00	5		350,000.00
Total dividends paid.....				37,798,840.12

^a This includes \$1,698,200, being the proceeds of assets on hand at the time of the change of stockholders.

NEW YORK, June 5, 1905.

S. DEMING, Assistant Treasurer.

EXHIBIT F 2.

Copy of agreement between the Panama Railroad Company and the Compania Sud-Americana de Vapores, dated September 10, 1902.

This agreement, made this tenth day of September, 1902, by and between the Panama Railroad Company, of New York, hereinafter called the railroad company, party of the first part, and the Compania Sud-Americana de Vapores, of Valparaiso, Chili, hereinafter called the steamship company, party of the second part, witnesseth:

ARTICLE I

The parties above named hereby mutually agree to cooperate in the carriage, transportation, landing and delivery of passengers, mails and cargoes between ports on the Pacific coast south of Panama, as hereinafter provided, and ports on the Atlantic Ocean and elsewhere, in connection with the several steamship lines now running to Colon, namely:

The Royal Mail Steam Packet Company,
The Hamburg-American Line,
The Compagnie Generale Transatlantique,
Fred'k Leyland & Co. (1900), West India and Pacific Branch,
The Harrison Line,
The Compania Transatlantica,
La Veloce Navigazione,
The Panama Railroad Company's Line,

and in connection with any other lines which may be added thereto, at the option of the railroad company, the railroad company being responsible for all freights and fares due by any such added line or lines until the steamship company shall signify its acceptance of same as cocarriers.

ARTICLE II.

During the term of this contract the railroad company shall not, directly or indirectly, run any steamers on the Pacific south of Panama, and shall (in so far as its charter and its contract with the Colombian Government may permit, and so far as it can consistently to its own safety and protection, under existing treaty stipulations) in every manner, lawfully and reasonably within its power, promote and protect the interests of the steamship company in all traffic south of Panama, in connection with said railroad and its Atlantic connecting lines, and especially against all forms of competition whatsoever, and will (so far as it is practicable, and except as hereinafter provided) give, turn over and direct to the

REPORT OF JOSEPH L. BRISTOW.

239

vessels of the steamship company, as far as it can lawfully control or influence the same, all business destined to Pacific points south of Panama, originating on the Isthmus of Panama, and carried on its railroad, or which may be brought to said Isthmus by its own ships or by other ships or lines; and especially will not, so long as the steamship company faithfully performs the stipulations of this agreement, become interested in or divide with any other person or persons, corporation or corporations, the earnings of the through line or any through business to or from points on the Pacific coast south of Panama; and upon all such through business full local tariff rates for the time being in force for transportation across the Isthmus of Panama shall be charged to all competing lines.

Further, the parties hereto, each for itself agree that all freight, passengers, baggage, specie, and mail matter confided to either for transportation, or brought by the one party to the other for the purpose of being conveyed, shall be transported and carried promptly and without undue delay.

The steamship company agrees, during the pendency of this agreement (in so far as its charter may permit, and so far as it can consistently with its own safety and protection under existing treaty stipulations), in every manner lawful and reasonable, within its power, to promote and protect the interests of the railroad company, and especially against all forms of competition whatsoever; the steamship company further agrees, during the pendency of this agreement, not to divert from the Panama route traffic to or from any of the Pacific ports south of Panama, originating at or destined to West Indian ports, Atlantic or Gulf ports of the United States or European ports; and for such business the steamship company shall not enter into contracts of any kind involving through billing, with any person or persons, corporation or corporations, other than the Panama Railroad Company, nor shall the steamship company compete, directly or indirectly (by reduced rates or otherwise), with the Panama route on such business. Nor shall the steamship company carry any cargo or passengers whatever to or from any port or ports north of Panama, including ports on the Chiriqui shore, from or to any other port or ports, nor run or maintain any line of steamers calling at any such ports north of Panama, or in any way compete for the traffic from or to said ports, or perform any service thereto or therefrom, or be directly or indirectly interested therein, and shall interchange all such traffic at Panama with the Pacific Mail Steamship Company. But so long as the Pacific Mail Steamship Company does not elect to enter service between Panama and Chiriqui the steamship company shall be at liberty to inaugurate or continue a Chiriqui service, and shall be free to land cattle on the beach at Panama, as has hitherto been done.

Provided, however, That nothing herein contained shall prevent the making by the railroad company of any agreement with the Pacific Steam Navigation Company on the same conditions and stipulations as are in this agreement contained.

And provided further, That if the navigation company or the Compania Sud-Americana de Vapores, for any reason, shall withdraw its service in connection with the railroad company at Panama, then the railroad company shall be at liberty to enter into a like agreement with any other carrier or carriers for such traffic in place of the company so withdrawing its service.

ARTICLE III.

The term "cargo" for the purpose of this agreement shall mean any description of cargo, merchandise, specie, jewelry, quicksilver, parcels, and animals.

Through passage tickets, bills of lading and receipts for parcels to be granted in the form now in use, with such modifications as the Panama Railroad Company shall find necessary to introduce in them, not prejudicial to the interests of the steamship company, or which may be made by mutual consent.

The proportion of the through freight accruing to the steamship company shall be: 33 1/3 per cent between Europe and ports south of Panama; 45 per cent between West Indies and all ports south of Panama; 38 per cent between New York and ports south of Panama.

Rates of freight are to be fixed by the initial carriers on both sides of the Isthmus, subject to the right of revision by the railroad company to the end that one carrier may not maintain reduced rates in connection with the railroad, in competition with another carrier also connecting with the railroad.

The rates are to be competitive as against other routes down to a minimum of 30¢ per ton, except Colombian produce, which is subject to special conditions.

Each of the parties hereto shall be at liberty to fix such passage rates by its ships or by its railroads as it may from time to time think fit. Through rates shall be the sum of the respective rates in force for the time being, it being agreed that any reduction which it may be found necessary to make to meet competition, shall be borne pro rata; such reductions may be made by the initial carrier without consultation with the others, so long as the minimum rates fixed by the several carriers are secured.

Charges for excess baggage are: Between Panama and Colon, 3 cents per pound; from New York to ports south of Panama, 5 cents per pound (divided, Panama Railroad

Company, 4 cents; Compania Sud-Americana de Vapores, 1 cent); from all Pacific ports to New York, per cubic foot, 6s. or \$1.50 (divided, Compania Sud-Americana de Vapores, 2s. 6d.; Panama Railroad Company, 3s. 6d.).

Employees of either of the contracting companies carried under this agreement by the other shall be entitled to reduction of 33 1/3 per cent on the published tariff.

Each party hereto shall be responsible for cargo while under its care and until delivery to its cocarrier, any responsibility accruing in regard to passengers or their baggage to be assumed in like manner with cargo.

In case any actions, suits, or claims shall be brought against any cocarrier, the carrier responsible, as above stipulated, shall bear and discharge any loss, damage, or expense incident thereto; provided that the carrier sued shall at once give notice to the other cocarriers, to the end that each may have opportunity to defend its interests.

The whole of the freight (except that which may be exceptionally "prepaid" homeward or "collect" outward freight) payable under this agreement shall be collected by the steamship line forming the connection at Colon, such line being accountable to the parties to this agreement for their respective proportions thereof every month. "Prepaid" homeward and "collect" outward freight shall be collected by the party of the second part, and the latter shall be accountable every month to the party of the first part and to the steamship line forming the connection at Colon, for their respective proportions.

Steamers of the steamship company shall make use of the wharf at La Boca provided by the railroad company whenever, in the judgment of the steamship company, it is safe and prudent to do so. But in the event that the steamship company's steamer shall not be able to get alongside of said wharf without delay, cargoes shall be lightered in the Bay of Panama; and in any case all cargoes shall be received and delivered either at La Boca, the American, or the English wharf. If steamers come to La Boca wharf, the cargoes shall be delivered to and taken away from alongside steamers as fast as they can receive or deliver the same.

Local cargo shall be received and delivered by the party of the first part as agent for the party of the second part in the city of Panama, transfer to and from steamer, including lighterage and / or wharfage, to be furnished by party of the first part, and party of the second part shall pay \$1.50 per ton for such services rendered.

The steamship company agrees to pay lighterage and wharfage at Panama out of its proportion of any through rates, as follows:

When lightered by the railroad company at the request of the steamship company, on all cargoes on which the through rates are more than \$10 per ton, per ton.....	5s., or \$1.25
On cargo between New York and Pacific ports, on which the through rate is not more than \$10 per ton, and is more than \$7.50 per ton, per ton.....	4s., or 1.00
On cargo from Europe to Pacific ports, on which the through rate is not more than 50s., and is more than 30s., per ton, per ton.....	4s., or 1.00
On cargo from Pacific ports to Europe, upon which the through rate is not more than 45s. per ton, and is more than 30s., per ton, per ton.....	4s., or 1.00
On cargo on which the through rate is 30s., or \$7.50 per ton, or less.....	3s., or .75
Upon specie, treasure, and all goods shipped at ad valorem rates, one-fortieth of 1 per cent.	
On each passenger.....	1.00
Upon all mails, per ton of 2,240 pounds.....	1.25
On extra baggage, per ton.....	1.25

By reason of the delay which would be caused by attempting to correctly differentiate the rate of lighterage due at the time the service is performed, it is mutually agreed that a rate of \$1 United States gold per ton shall be charged and collected, at the time of service; the additional 25 cents United States gold per ton upon such cargo as may prove entitled thereto, or the excess of 25 cents per ton, as the case may be, to be paid to the railroad company, or refunded to the steamship company, as the case may be, as soon as such amounts are ascertained.

All payments for lighterage to be made by the party of the second part by sight drafts of the Panama agency upon the New York agency, which drafts are to be settled in the monthly accounts of the party of the first part.

Whenever the steamship company's steamers lie at La Boca wharf, and the parties agree that it is necessary to discharge into or load from the railroad company's lighters, the railroad company shall make no charge for lighterage or cranage in addition to wharfage; but one-half the cost of any overtime work shall be borne by said steamship company.

When steamers load and / or discharge alongside La Boca wharf, no charge shall be made on passengers, mails, specie, or treasure, except that any vessel receiving or landing passengers only shall pay a wharfage rate of \$50 per diem, and a landing charge of 10 cents per capita for each passenger received or landed; but the railroad company shall be paid

as wharfage on all through cargo on which the through rate is more than 30c. or \$7.50 per ton, 80 cents per ton, in American currency, or its equivalent, and on all through cargo on which the through rate is 30c. or \$7.50 per ton or less, 60 cents per ton in American currency or its equivalent, and 10 cents per ton on cargo for the use of cranes, the use of such cranes, however, to be optional with the steamship company; and the railroad company agrees to provide at its said wharf at La Boca the necessary equipment for the efficient operation thereof.

All settlements for wharfage shall be made in the manner described above for settlements of lighterage.

The divisions and other conditions of this article may be altered by mutual consent without affecting any of the other stipulations contained herein.

The term "ton" is understood to mean 40 cubic feet, 2,000 pounds, or 2,240 pounds, as per bill of lading.

Outward cargo shall be forwarded promptly from Colon to go forward by first connecting steamer after its arrival at Panama. The steamship company undertakes to provide sufficient tonnage so as to be able to receive cargo on board its steamers with all possible dispatch, but in the event of its first connecting steamer not accepting delivery the railroad company shall have the option of forwarding cargo by the next departing steamer of either the Pacific Steam Navigation Company or the Compania Sud-Americana de Vapores, or other carriers substituted for said Pacific Steam Navigation Company, under the provisions of Article II hereof.

The railroad company will receive instructions direct from the agent of the party of the second part as to when mails are to be landed or embarked. Local mails are to be landed immediately on the arrival of the steamer, tide suitable or not, and on the reef as hitherto when necessary. Expenses of transporting mails after landing to be paid by the steamship company concerned.

The railroad company shall advise promptly, free of charge, by wire or telephone, the agent of the steamship company of the arrival of the steamers at Colon, giving information concerning mails, passengers, specie, cargo, etc., and destination.

The Panama agent of the steamship company shall advise promptly the superintendent of the railroad company free of charge of the departure of steamers from the last port of call, giving information respecting mails, passengers, specie, cargo, etc., and destination.

ARTICLE IV.

Any and all questions which shall or may arise touching this agreement or the construction thereof, or as to any other matters and things to be done or performed by either of the parties hereto, as to which the parties hereto can not agree, shall be submitted to the decision and award of two arbitrators, one to be chosen by each of the parties, who shall be disinterested persons resident in New York or on the Isthmus of Panama. In case said arbitrators shall be unable to agree, they may choose a third arbitrator, and the decision of any two of such arbitrators shall be final. All hearings by such arbitrators shall be held in New York or on the Isthmus of Panama. Arbitration on the Isthmus to be confined to local matters that need immediate decision.

ARTICLE V.

The Panama Railroad Company agrees to transport coal and other supplies for the steamship company at the following rates, viz:

	Per ton.
By each of its steamers from New York to Colon, supplies other than coal, exclusively for the use of the steamship company, at the rate of.....	\$5. 00
And from Colon to Panama (for haulage).....	3. 00
And to lighter same at additional.....	1. 00
For coal from Colon into lighters at Panama wharves, including all charges for loading, etc., at Colon.....	4. 00
For coal from Colon to alongside steamers in the Bay of Panama.....	5. 00

ARTICLE VI.

It is mutually and expressly understood and agreed that if at any time during the continuance of this agreement a majority of the shares of the railroad company or its railroad property shall be purchased or acquired by the United States of America, or by any person or persons representing it, or acting in its behalf, then either party hereto may give notice in writing to the other of its intention to terminate this agreement, and at the expiration of six months from the giving of such notice this agreement shall terminate, come to an end, and be utterly null and void thenceforth, anything herein contained to the contrary notwithstanding.

ARTICLE VII.

This agreement shall take effect upon the expiration of the existing agreement between the parties, on September 10, 1902. It shall continue in force for twenty-one months from the date hereof, and thereafter, provided that either party may, after the expiration of said term of twenty-one months give ninety days' notice of its desire to terminate the same, and thereupon, at the expiration of ninety days from the giving of such notice, this contract shall cease, determine, and come to an end.

In witness whereof the parties hereto have caused these presents to be signed by their respective officers thereunto duly authorized, and their respective corporate seals to be hereunto affixed, the day and year first above written.

[SEAL.]

Attested as to signature:

JOHN R. LIVERMORE.

[SEAL.]

PANAMA RAILROAD COMPANY,
E. A. DRAKE,
Second Vice-President and Secretary.

Attest:

T. H. ROSSBOTTOM,
Assistant Secretary.

HORATIO LYON.

EXHIBIT F 3.

Copy of amendatory agreement between the Panama Railroad Company and the Compania Sud-Americana de Vapores, dated January 17, 1903.

This memorandum of an agreement, made and entered into this seventeenth day of January, one thousand nine hundred and three, by and between the Panama Railroad Company, party of the first part, and the Compania Sud-Americana de Vapores, party of the second part, witnesseth:

That whereas the parties hereto, heretofore and on the tenth day of September, 1902, entered into a contract regulating the transportation of freight to and from ports upon the Pacific coast of South America, south of Panama, passing over the railroad of the party of the first part, and transported by the steamers of the party of the second part to and from Panama; and

Whereas the parties hereto have agreed to an amendment of the said contract as hereinafter expressed.

Now, therefore, in consideration of the premises and of the sum of one dollar by each of the parties hereto to the other in hand paid, the receipt whereof is hereby acknowledged, and of the various covenants and provisions in the said contract of September 10, 1902, contained and expressed, the parties hereto have covenanted and agreed, and do, by these presents, covenant and agree to and with each other as follows:

First. Article II of the said contract of September 10, 1902, shall be; and is hereby, amended by adding thereto the following provision, to wit:

"And provided further, that the steamship company shall be at liberty to transport by other means such traffic to and from Europe, originating at, or destined to Pacific coast ports south of Guayaquil as it has been customary for the steamship company so to transport, under previously existing arrangements."

Second. Said amendment shall be taken and construed as a part of said original contract of September 10, 1902, with like force and effect as if it had been originally made a part thereof.

In witness whereof the parties hereinbefore named have caused these presents to be signed by their officers thereunto duly authorized, and their corporate seals to be hereto affixed, the day and year first hereinabove written.

[SEAL.]

PANAMA RAILROAD COMPANY,
E. A. DRAKE,
Second Vice-President and Secretary.

In presence of—

T. H. ROSSBOTTOM,
For Panama Railroad Company.

[SEAL.]

COMPANIA SUD-AMERICANA DE VAPORES,
HORATIO LYON, Manager.

In presence of—

JUAN PETERSEN,
For Compania Sud-Americana de Vapores.

REPORT OF JOSEPH L. BRISTOW.

243

EXHIBIT F 4.

Copy of agreement between the Panama Railroad Company and the Pacific Steam Navigation Company, dated December, 1904.

Working agreement made this seventeenth day of December, 1904, between the Panama Railroad Company of New York, and the Pacific Steam Navigation Company of Liverpool, as follows:

First. That the Pacific Steam Navigation Company agree to maintain a service in connection with the Panama Railroad Company between Panama, Guayaquil, and way ports that shall be adequate for all the traffic to and from these points that seeks or can be secured for the Isthmus route.

Second. That the Pacific Steam Navigation Company agree to maintain a fortnightly through service between Panama, Guayaquil, Valparaiso, and the way ports south of Guayaquil, and that when the traffic justifies an increase of tonnage, such increase will be made. Whenever this through service is interrupted or unable to deal with the through traffic between Guayaquil and Panama, the Caletero steamers are to make the connection, without additional charge to shippers or consignees, unless under circumstances which would entail a charge if the cargo had been carried by the through boat in the regular way.

Third. That the initial carrier on both sides of the Isthmus shall have authority to make through rates of freight which are to be competitive with other routes down to a minimum of thirty shillings (30s.) per ton of 2,240 pounds or forty (40) cubic feet, lower rates to be made by mutual consent.

Should any cargo which has gone out via the Isthmus require to be returned by that route for any purpose, the Pacific Steam Navigation Company undertakes to charge the same through rate of freight homeward as that which obtained outward.

Fourth. Division of rates are to remain as at present, and bills of lading shall be those recently agreed upon in London and those now in use from New York.

Fifth. The Pacific Steam Navigation Company steamers are to load and discharge at the La Boca pier, when in their judgment it is safe and prudent to do so, as at present, but in the event that they shall not be able for any reason to reach the wharf without delay, and only in that event, their cargoes are to be lightered in the Bay of Panama, at the option of the steamship company, either by the lighters of the railroad company or those of the Pacific Steam Navigation Company.

When steamers load and/or discharge alongside La Boca wharf, no charge shall be made on passengers, mails, specie, or treasure, except that any vessel receiving or landing passengers only shall pay a wharfage rate of \$50 per diem and a landing charge of 10 cents per capita for each passenger received or landed; but the Panama Railroad Company shall be paid as wharfage on all through cargo on which the through rate is more than thirty shillings (30s.) or \$7.50 per ton, 80 cents per ton in American currency, or its equivalent, and on all through cargo on which the through rate is 30s. or \$7.50 per ton or less 60 cents per ton in American currency, or its equivalent, and 10 cents per ton on cargo for the use of cranes, the use of such cranes, however, to be optional with the navigation company; and the railroad company agrees to provide at its said wharf at La Boca the necessary equipment for the efficient operation thereof.

The navigation company agrees to pay lighterage and wharfage at Panama out of its proportion of any through rate as follows:

When lightered by the railroad company at the request of the navigation company, on all cargoes on which the through rates are more than \$10 per ton, per ton.....	5s., or \$1.25
On cargo on which the through rate is not more than \$10 and is more than \$7.50 per ton.....	4s., or 1.00
On cargo on which the through rate is 30s., or \$7.50 per ton, or less.....	3s., or .75
Upon specie, treasure, and all goods shipped at ad valorem rates, one-fortieth of 1 per cent.	
On each passenger.....	1.00
Upon all mails, per ton of 2,240 pounds.....	1.25
On extra baggage, per ton.....	1.25

Whenever the navigation company's steamers lie at La Boca wharf, and the parties agree that it is necessary to discharge into or load from the railroad company's lighters, the railroad company shall make no charge for lighterage or cranage in addition to wharfage; but one-half the cost of any overtime work shall be borne by said navigation company.

All cargo handled either way by the navigation company's lighters (when their ships can not go to La Boca) at any of the railroad company's wharves at Panama, that is to say, La Boca, the American or English wharf, is to pay the railroad company twenty-five cents (25c.) gold per ton.

The railroad company agrees (when requested by the navigation company) to receive and deliver as agents for the navigation company all local cargo in the city of Panama, including lighterage and wharfage, to be furnished by the railroad company at one dollar and fifty cents (\$1.50) per ton. Should the lighterage receipt and delivery of the local cargo be performed by the steamship company, as at present, the charge for wharfage only is to be twenty-five cents (25c.) American gold per ton.

Sixth. It is agreed that the Panama Railroad Company will not at any time give better terms to any other steamship company working with it to the south.

Seventh. The divisions of rates referred to in the fourth article, for the Pacific Steam Navigation Company, are as follows: 33 1-3 per cent between Europe and ports south of Panama; 45 per cent between West Indies and all ports south of Panama; 38 per cent between New York and ports south of Panama.

Eighth. Either party may terminate this agreement by 90 days' notice to the other in writing to that effect.

PANAMA RAILROAD COMPANY,
E. A. DRAKE,

Vice-President and Secretary.

THE PACIFIC STEAM NAVIGATION CO.

J. BRUCE ISMAY, Agent,

Per J. W. LEE.

EXHIBIT F 5.

Memoranda of conversation had with Mr. E. A. Drake, secretary and treasurer, and Mr. R. L. Walker, traffic manager of the Panama Railroad Company.

NEW YORK, June 1, 1905.

Mr. Walker stated that the rate to Europe on cocoa from Guayaquil is 45 shillings via Magellan, and the present rate via the Isthmus is 60 shillings, or \$15, per ton of 2,240 pounds, the rate via the Isthmus having been reduced last April.

(NOTE.—Have been advised that the reduction has been withdrawn, and the old rate of \$17 now prevails.)

Mr. Walker questions the correctness of Consul-General Dietrich's statement as to the rate on coffee from Guayaquil to New York via Magellan of \$8.75, alleging that coffee moves by the way of Panama and not by Magellan from Guayaquil.

Mr. Walker states that the reason the rates from South America to New York and Europe via Panama are so much higher than from Europe and New York to South America is that the initial carrier fixes the rate and the South American lines charge whatever they please, the Panama Railroad taking its proportion of the through rate.

Mr. Walker states that the rate on general merchandise from Valparaiso to New York is \$30 per ton; from Valparaiso to Europe, \$25 per ton.

Mr. Walker states that if the rate across the Isthmus is reduced and made a flat rate it will not have the effect of reducing the through rate, in his judgment, as the steamship lines on either side will get together to protect their own interests and will absorb the difference, and the rate will be the same as before, the only difference being that the steamship lines on either side will get what the Panama Railroad has been getting heretofore.

In reply to the question as to what effort had been made at any time in the past to secure steamship connections between any of the Gulf ports and Colon, or to establish a line running from the Gulf ports to Colon, Mr. Drake said that the railroad had at various times endeavored to induce Gulf lines to establish regular connections between Colon and the United States Gulf ports; that a contract was made with a line operating two ships from Mobile to Colon, and the business was not developed so as to be remunerative, and the line was broken up by the death of the proprietor, and the railroad was unable to get anybody to resume. The principal objection to the establishment of a line from New Orleans has been the severe quarantine regulations against Colon as an unhealthy port, and by some unexplained manner the United Fruit Company has been able to secure such consideration from the health authorities of New Orleans as to enable them to make the port of Colon. Since the United States Marine Hospital has established outposts with representatives at so-called unhealthy ports the quarantine officials have accepted certificates of that officer as a bill of health. Shortly after the breaking of the contract with the Pacific Mail in 1893 the Panama Railroad Company chartered, in cooperation with the merchants of New Orleans, attempted to establish a line by chartering a steamer which carried one cargo coastwise to New Orleans, with the result that the effect of that one trip by the Panama Railroad Company an arrangement was entered into by the Southern Pacific Railroad Company with the merchants of New Orleans which caused them to withdraw their promised patronage to the Panama Railroad Company, and since then no effort has been made to establish connections until the arrangement with the United Fruit Company.

There are two cable lines to the Isthmus. The principal one is the Central and South American Cable Company, running from Galveston to Coatzacoalcas, to Salina Cruz, to the principal ports in Central America on the Pacific coast, to Panama, and as far south as Valparaiso. The other is the line running from London or Liverpool to the West Indies, then to Colon. It is said that the latter line is almost always out of repair.

Almost all Central American, Panama, and South American cable messages are sent via Galveston.

The Panama Railroad Company has charged commercial messages a flat rate of \$1 for ten words or less and 10 cents a word for every word over ten. Steamship companies were charged a flat rate of 10 cents a word. Now the railroad company charges everyone 25 cents for ten words or less and 2½ cents a word over ten. Reduction went into effect February 1, 1905.

By through telegraph business is meant business that goes from the United States via Galveston, Mexico, and Central America to Panama and from there to Colon, or vice versa. There is very little through business from Europe to Panama and south via the West Indies line from England to Jamaica and Colon, and vice versa.

Commercial messages have not been reduced by the Galveston line, as the company says it makes the same rate to Colon that it does to Panama, and therefore they will not reduce their charges to Colon.

Practically the whole amount of the through business across the railroad telegraph line is business to Colon via Panama, and vice versa.

Mr. Drake states that in October, 1880, the Colombian Government hypothecated the annual indemnity for a period of twenty-seven and one-half years, and the railroad company issued subsidy bonds. Bonds and interest aggregating \$250,000 were the payments to be made, and \$25,000 was assigned to the Department of Panama, but after the Republic of Panama was established the United States acquired this \$25,000 payment, and it is now paid to the United States Government. After the twenty-seven and one-half years expire, or in 1908, the United States Government, by the treaty with the Republic of Panama, agrees to pay \$250,000 a year to the Republic.

EXHIBIT G.

List of questions submitted to Mr. H. G. Prescott, acting superintendent of the Panama Railroad on the Isthmus of Panama, and his answers thereto.

COLON, ISTHMUS OF PANAMA, February 16, 1905.

How many tons of through freight has the Panama Railroad handled per month for the last year? Is this an average business for a year?

What proportion of this freight is moved eastward and what proportion westward?

Of the westward, what proportion goes north of Panama?

What proportion goes south of Panama?

What proportion is destined for Panama?

What proportion of the eastward freight originates north of Panama?

What proportion south of Panama?

What proportion at Panama?

Is the railroad with its present facilities able to successfully, efficiently, and economically handle its business? If not, what additional facilities are needed? Include in this any additional rolling stock required.

What has been the effect of the reduction of the local freight and passenger rates upon the revenues of the railroad?

Are the roadbed and bridges in good condition?

Are any extensive repairs needed to any of the railroad's property?

File 2243.]

OFFICE OF GENERAL SUPERINTENDENT,
PANAMA RAILROAD COMPANY,
Colon, February 18, 1905.

Hon. J. L. BRISTOW,
Special Commissioner to the Panama Railroad Company, Colon.

DEAR SIR: As per your memorandum of February 16, I have the honor to hand you the information called for.

You will find in one statement all the information in regard to the through freight handled each month last year, and also a total for the four years previous.

Another statement shows, as near as we can in the limited time, the effect of the reduction of the local passenger and freight rates, which statement was made up by our local auditor.

I would say that the roadbed and bridges are in good condition. We will soon have a

careful examination made of all the bridges to determine their exact condition as regards future requirements.

I would also say that the property of the Panama Railroad is in good condition and requires only ordinary repairs.

I also inclose a statement showing the rolling stock of the company.

Yours, truly,

H. G. PRESCOTT, Acting Superintendent.

Tons of freight moved by the Panama Railroad during 1904.

Month.	Eastward.			
	Originating north of Panama.	Originating south of Panama.	Originating at Panama and way stations.	Total tons eastward.
	<i>Tons—feet.</i>	<i>Tons—feet.</i>	<i>Tons—feet.</i>	<i>Tons—feet.</i>
January.....	6,521.06	3,562.22	2,312.29	12,426.17
February.....	13,247.35	3,002.19	3,067.20	19,317.34
March.....	13,526.12	3,973.21	2,942.12	20,442.05
April.....	10,233.16	3,904.18	2,451.24	16,588.18
May.....	5,502.38	6,842.14	2,839.04	15,184.16
June.....	8,803.32	4,758.15	3,278.10	16,840.17
July.....	6,511.36	4,599.26	3,187.12	14,298.34
August.....	4,138.08	3,535.37	4,378.08	12,052.13
September.....	3,013.06	5,599.17	3,596.07	12,108.30
October.....	3,283.30	4,828.39	4,077.39	12,190.28
November.....	4,063.17	5,635.07	3,626.31	13,325.15
December.....	6,448.35	3,779.35	4,202.04	14,430.34
Total.....	85,324.31	53,962.30	39,950.00	179,237.21

Month.	Westward.			
	Destinations north of Panama.	Destinations south of Panama.	Destinations Panama and way stations.	Total tons westward.
	<i>Tons—feet.</i>	<i>Tons—feet.</i>	<i>Tons—feet.</i>	<i>Tons—feet.</i>
January.....	6,062.34	5,060.18	4,419.03	15,542.15
February.....	6,426.15	4,702.15	6,664.38	17,793.28
March.....	9,604.23	5,890.27	6,046.37	21,541.22
April.....	7,927.06	4,402.13	5,575.28	17,905.07
May.....	9,307.25	6,040.23	4,682.04	20,030.12
June.....	8,048.18	4,671.11	4,687.01	17,406.30
July.....	7,819.27	4,986.25	6,040.24	18,846.36
August.....	8,249.05	5,456.03	5,891.02	19,596.10
September.....	7,253.07	5,100.00	6,268.05	18,621.12
October.....	8,293.11	5,838.32	7,357.11	21,489.14
November.....	8,032.04	5,922.06	8,545.38	22,500.08
December.....	8,391.38	6,434.21	9,179.06	24,005.25
Total.....	95,416.13	64,305.34	75,357.37	235,080.04

OTHER YEARS.

	Tons.
1900.....	357,377
1901.....	385,584
1902.....	346,689
1903.....	349,538

COLON, February 17, 1905.

M. DELEVANTE, Local Auditor.

Comparative statement of freight traffic over the Panama Railroad from the 17th to 31st of January and from the 1st to 15th of February, 1905, showing the effect of the new tariff.

	Packages.	Weight.	Amount.
January 17 to 31.....	9,238	639,256	\$4,724.25
February 1 to 15.....	7,723	600,000	3,291.32
Increase.....		21,744	
Decrease.....	1,515		1,432.93

COLON, February, 18, 1905.

M. DELEVANTE, Local Auditor.

REPORT OF JOSEPH L. BRISTOW.

247

Comparative statement of passenger traffic over the Panama Railroad from the 17th to the 31st of January and from the 1st to 15th of February, 1905, showing the effect of the new tariff.

	January.	February.	Increase.	Decrease.
<i>First class.</i>				
Number of fares.....	204	496	292	
Amount.....	\$511.30	\$626.48	\$115.18	
<i>Second class.</i>				
Number of fares.....	3,253	6,293	3,040	
Amount.....	\$2,417.70	\$2,566.10	\$148.40	

COLON, February 18, 1905.

M. DELEVANTE, Local Auditor.

Memorandum of present equipment of freight cars in service of the Panama Railroad Company February 1, 1905.

Class of cars.	Num-ber of cars.	Capa-city.	Total.
		<i>Tons.</i>	<i>Tons.</i>
Box.....	50	26	1,000
Do.....	534	12	6,408
			7,408
Flat.....	5	20	100
Do.....	146	12	1,752
			1,852
Coal.....	173	12	2,076
Grand total.....	908		11,336

REMARKS.—All these cars have old-style link and pin couplings, and hand brakes on only one truck. The box cars are 30 feet long, 8½ feet wide, 7½ feet high, and 12 feet from rail to roof. The flat and coal cars are 30 feet long, 8½ feet wide, and 4½ feet from rail to floor.

Recommend:	<i>Tons.</i>
700 box cars of 30 tons capacity, modern air and couplings.....	21,000
3,300 flat cars of 30 tons capacity, modern air and couplings.....	9,000
300 coal cars of 30 tons capacity, modern air and couplings.....	9,000
4,300 Total.....	39,000

Memorandum of present equipment of motive power in service of the Panama Railroad Company February 1, 1905.

SWITCH ENGINES.

	Number.
I. In good condition. Boilers have been renewed within the past four years.....	7
II. In fair condition. Are in service, but will require new boilers in a year or two.	
These switch engines are giving satisfactory service.....	3
III. Condemned.....	1
Total switch engines.....	11

REMARKS.

- IV. Five of the switch engines are Baldwin 4-wheel connected cylinders, 14 by 22 inch diameter, drivers 38 inch. Used in Colon where curves are sharp.
- V. Five of the switch engines are Hinckley & Rogers 6-wheel connected 15 by 22 inch cylinders, 42-inch drivers, and are used in Panama where grades are heavier.

ROAD ENGINES.

	Number.
VI. Out of service. Require extensive repairs.....	4
VII. Light engine, 15 by 22 inch cylinder, used on La Boca Branch (serviceable)....	1
VIII. Baldwin, 8-wheel, 16 by 24 inch cylinder, 54-inch drivers, used on passenger trains and satisfactory for this service.....	6
IX. Cooke, 8-wheel, 17 by 24 inch cylinder, 60-inch drivers, used in freight service... 13	
Total road engines.....	24

Recommend that 4 additional switch engines be supplied, 2 each of types IV and V. The ones in service are satisfactory. Recommend also that the 13 freight locomotives (Type IX) be replaced by 10-wheel 70-ton locomotives, 54-inch wheel, cylinder 19 by 26 inches.

File 2243.]

OFFICE OF GENERAL SUPERINTENDENT
PANAMA RAILROAD COMPANY,
Colon, February 20, 1905.

Hon. J. L. BRISTOW,
Special Commissioner to Panama Railroad Company, Colon.

DEAR SIR: With reference to the report I furnished you as to the present equipment of the Panama Railroad, I desire to explain the situation from our point of view.

At times in the past we have been short of cars, but in every instance this would not have happened if there had been steamers enough to take the cargo away promptly; we sometimes have to keep cargo on the Isthmus for one or two weeks waiting for steamers, and often in order to realize our cars we unload the cargo into warehouses and store it; then when the steamers arrive we have to reload the cargo, necessitating extra handling.

We now have on the Isthmus about 40,000 sacks of coffee from Central America to be dispatched by the Royal Mail Steamship Line. Some of this coffee has been here for a week. There is a steamer here now of the Royal Mail Line which will take away between 10,000 and 15,000 sacks, but the rest of it will not be taken away before the middle of the week.

We have over 200 carloads of freight in Panama for Central America and San Francisco; some of this will be taken by the steamer that sails on Wednesday, 22d instant, but the balance will have to wait until the steamer arrives, which will probably be a week.

In the meantime, we have had to supply cars to receive cargo that is being brought to the Isthmus, so that while it might appear that we have not cars enough to handle the business, this complaint might equally be applied to the lack of steamers to take the cargo away, for, were we able to deliver our cargo to the connecting steamers immediately we would always have cars enough to handle the interoceanic traffic.

Of course, with the canal work increasing, there will be more demand for rolling stock on the railway, and the new cars, if any are ordered, should, in my opinion, be of the most modern kind, and of a larger capacity than the ones that we now have.

Very truly, yours,

H. G. PRESCOTT,
Acting Superintendent.

EXHIBIT H.

Complaint of the representatives of the Central and South American countries.

WASHINGTON, D. C., April 8, 1905.

To the Hon. WILLIAM H. TAFT,
Secretary of War.

MR. SECRETARY: The Isthmus of Panama has offered two great obstacles to the exchange of products between the eastern coast of the United States and the Latin-American countries which we have the honor to represent, and which countries carry on their commerce on the coast of the Pacific. Of these two obstacles (a) is physical, being the land which separates the two oceans; the other is artificial, and has been produced as much by the monopoly which the railroad line from Colon to Panama has had and still enjoys as by the

* Since the above was written I learn that the extra ship, *San Mateo*, now at La Boca, will take the Central American cargo, commencing February 21; but we had to receive the cargoes from four ships before we could commence getting rid of our cargo on hand.

monopolies which that same railroad company has created for the navigation between Colon and New York and between Panama and the western coast of North and South America.

The United States, with its noted energy, is about to sweep away the physical obstacle, which, however, will require many years. The same is not the case with the artificial obstacles. The American Government is now absolute owner of that railroad and of the steamers which ply between Colon and New York. We are informed by the press that your excellency must decide very shortly the manner in which that railroad and those steamers are to be administered, and we hasten for that reason to invite your excellency's attention to the end that no measure can be adopted which will be more effective in making closer the commercial relations of all our countries with the United States than the systematizing of the transit on the Isthmus upon equitable and liberal basis. The opportunity is an exceptional one, and it is advisable to take advantage of it for reasons of mutual interest.

The first evil consequence of the monopolies has been the high tariff rates, which we may call almost prohibitory, and which have diverted the commercial current toward Europe. Some data which we give below prove this assertion.

The nitrate of Chile can not be brought via Panama. The combined tariff rates between the railroad company and the trust of the steamers of the southern Pacific coast fix a freight of 47 shillings sterling a ton. That same nitrate reaches New York by steamers via Magellan, paying 23 shillings sterling a ton.

The Peruvian sugar pays by the Isthmus 30 shillings sterling a ton, and 23 shillings sterling a ton via Magellan.

The cocoa of Guayaquil, via Panama, pays to Europe from 52 to 58 shillings sterling a ton, and for New York 65 to 68 shillings sterling a ton.

Coffee is exported from Central America to Europe via Magellan cheaper than by way of Panama.

The metals of Bolivia, especially tin, can not be brought to the United States via Panama. Frequently the case arises that products from our coasts are imported into the United States after being transhipped either in Liverpool, Havre, or Hamburg, because of the lower freight rates for Europe as against the United States.

It may be calculated that the most distant ports of our respective Republics are from New York 4,500 miles via Panama. From those same ports to New York there is a distance of over 11,000 miles via Magellan, and nevertheless the transportation by this last route and the transportation by steamer from our ports to Europe is on an average from 25 to 30 per cent cheaper than our commerce with New York via Panama.

From this considerable difference of freight rates it is apparent that the European consumer has the advantage of buying our products cheaper than the American consumer.

So that your excellency may perceive that the injustice of the high freight rates is found in the railroad tariff rates, it will suffice to know that from the freight of the 4,500 miles between the extreme ports and New York the Panama Railroad Company takes for itself the 33 per cent for the 46 miles of transit.

Looking into this question now from the point of view of the exportation from this country into our countries, it is interesting to make a comparison of the freight rates from New York and our coasts via Panama and those of similar articles between Europe and the western coast of the Pacific, also via Panama.

By taking articles of little value, we find that—

Rice, for example: From Hamburg shipments of rice from India are constantly being made to Ecuador via Panama at the rate of from 30 to 33 shillings sterling per ton of 2,240 pounds, or, say, from \$7.50 to \$8 per ton, while the same article from New York pays at the rate of 60 cents per 100 pounds, or, say, \$13.20 per ton, an overcharge of almost 75 per cent. And what is said of rice may be applied to all articles given as second class in the Panama Railroad Company's tariff, of which we herewith transmit a copy. This difference in the freight rate tips the scales in favor of the European markets, almost excluding, or at least limiting to a narrow circle, the exportations of the same class of articles from New York, to the detriment of the commerce of the United States.

It is to be observed at the same time that on certain articles on which the Panama Railroad Company collects by cubic measurement the freight from New York to the Pacific ports of South and Central America is so high that it represents from 40 to 50 per cent of the cost of the merchandise.

For example: Twelve coal-oil stoves, which in New York, free on board, cost from \$45 to \$48, pay on the coast of Ecuador and of Peru 30 and 37½ cents, respectively, per cubic foot, or, say, \$19.20 to \$21 which represents 42.66 per cent upon the cost price. The same article bought in Germany would hardly pay a freight of from \$6.40 to \$6.75.

The distance between Plymouth and Colon is 4,540 miles, and the distance between New York and Colon is 1,981 miles, so that Plymouth is 2,519 miles farther from Colon, and nevertheless the freight rates from Europe to our coasts via the Isthmus are lower than those from New York to our coasts.

As the transit by the Isthmus is the same in either case, it is plain that the difference in freight originates from the high tariff rates of the steamship line plying between Colon and New York, or, say, from this artificial monopoly created by the Panama Railroad Company, which also owns the steamship line.

Although the navigation companies on the Pacific do not belong to the Panama Railroad Company, this company has arranged matters so that the northern coast may be exclusively served by the Pacific Mail Steamship Company and the southern coast by two steamship companies formed into a trust—viz, the Pacific Steam Navigation Company and the South American Steamship Company.

These lines, as a matter of course, take advantage of this privilege to exact as high rates as possible.

The working of this monopoly is very plain: The Panama Railroad Company grants transit facilities only to the combined companies above referred to, while it hinders and closes all doors to other ships outside of the combination arriving at Colon or Panama.

For example: Not long ago a large exporting New York firm sent a cargo steamer to Colon. Besides the difficulties of securing a pier, the cargo, when unloaded, remained on the piers of Colon for several weeks without transshipment. It is useless to say that the interested parties stopped sending any more steamers to Colon.

Owing to the same monopoly the Pacific Steam Navigation Company and the South American Steamship Company had to abandon the extension of their traffic up to San Francisco, Cal., leaving the field exclusively to the Pacific Mail Steamship Company, which has under control all the traffic of the coast of Central America.

The drawbacks of the artificial arrangement are more plainly shown by examining the situation as to rates for passengers. While Callao and Liverpool are almost at the same distance from New York, a first-class passenger can go from New York to Liverpool even for \$60, while the ticket for Callao, also from New York, will cost him at least \$185. No doubt if there were competition this figure would be considerably reduced.

The anomalies are more noticeable when considering the prices of passenger tickets for the northern coast of Panama and for Panama itself. The Panama Railroad Company charges for a first-class ticket between New York and San Francisco, 3,300 miles, \$105.

To Panama, only 2,021 miles, including the crossing of the Isthmus, the company charges \$100, and to the ports of Central America, half the distance from New York, the company charges from \$115 to \$160.

The above anomaly is explained, because the intercontinental railroads are competing in the traffic between New York and San Francisco, and under the present régime there is no possible competition in regard to the other ports. There is no doubt that the Panama Railroad Company and the Pacific Mail Steamship Company when they carry a passenger from New York to San Francisco—and they keep him during one month, approximately—for \$105 do not lose money. Therefore their profit is exorbitant when for carrying a passenger to Panama and boarding him for six or seven days only they charge \$100. This shows the necessity of the free competition by means of the system of equal treatment to all the ships, or, say, open door on the Isthmus.

A not insignificant detail is that of charging 5 cents gold for each pound of baggage in excess of the amount allowed passengers crossing the Isthmus.

We can assert that all these drawbacks turn away the passengers from the Isthmus route, which is the shortest, even for going to Europe, giving to the merchants the opportunity to pass through the United States and to study its manufactures. Instead of doing this a considerable amount of traffic has been established by the route of Magellan or crossing the Andes between Chile and Argentina. Those who take the Andes route going to Europe have no opportunity to compare the American with the European industries.

We can not but mention here that the Panama Railroad Company charges 45 cents per pound on mail crossing through the Isthmus, which has caused some of our countries to impose an extra charge of 1 cent for each half ounce letter postage by that route.

The exchange of parcels post between the United States and our Republics becomes also more expensive than that between the United States and other countries by reason of the high freight rate of the Panama Railroad, which limits to an insignificant figure the exchange of small articles between the United States and the South American Republics, to the detriment of the commerce of the United States. This circumstance is the reason why many of our countries have not as yet made a postal convention with the United States.

The Panama Railroad Company has, up to now, managed that business, having in view only the immediate profits. We believe that the Government of the United States, without losing sight of that profit, and perhaps increasing it, should also be mindful of the convenience of broadening and facilitating our reciprocal commerce. By so doing it will anticipate, in a proportion not to be despised, the benefits of the great work it has undertaken.

We therefore submit to the consideration of your excellency the practicability when on deciding upon the future system of administration on the Isthmus of taking into account:

First. The propriety of reducing the railroad tariff rates in proportion to the distance to the normal price in the United States;

Second. That the same be done with the freight tariff rates and passenger rates between Colon and New York;

Third. That the ships of all nations and the cargoes of all origins may have the facilities of transit;

Fourth. That the railroad tariff rates be reduced as much as possible for the first-class mail and parcels post; and

Fifth. That the works of the canal do not absorb entirely the service of the railroad line, so that the traffic of merchandise may not thereby be interfered with.

The adoption of these measures would expand considerably the interchange of products through the Isthmus route, establishing between the United States and our coast a large share of the commerce which is to-day carried on with Europe and establishing a current through the short route of 4,500 miles, maximum, in place of 11,000 miles, for it is to be supposed that the two companies which to-day take the route of Magellan will find it convenient to divide their ships between the Pacific and the Atlantic and more economical to transport their cargoes in ten to fifteen days by the route of the Isthmus than in sixty days by the route of the Strait of Magellan.

These companies send three steamers monthly, which transport 12,000 tons, more or less and as many tons on the return trip, or, say, nearly 300,000 tons annually. A very large part of this would pass by the Isthmus, thus giving more freight to the railroad and return freight to the ships taking to the Isthmus the material which the construction of the canal will require, a circumstance which will cheapen the transportation of said material.

Another circumstance which would make closer our relations would be that of greater rapidity in our communications. The United States can do much in this respect on this side of the Isthmus. We will call the attention of our governments to this very point, recommending to them that if it is possible to enter into an agreement to insure at least two fast trips monthly between Valparaiso and Panama, stopping at the principal ports en route, and a like improvement on the Central American coast.

We will also recommend to our governments the propriety of lowering the freight and passenger rates on the steamers of the Pacific, although we believe that this will be obtained through competition incident to the abolishment of the monopoly on the Isthmus.

We close, praying your excellency that you deign to give kind consideration to these statements, which are inspired by our sincere eagerness to make our commercial relations closer between the United States and our respective countries.

With sentiments of the most distinguished consideration, we subscribe ourselves,

J. B. CALVO,
Minister of Costa Rica.
LUIS F. COREA,
Minister of Nicaragua.
MANUEL ALVAREZ CALDERÓN,
Minister of Peru.
JOAQUIN WALKER-MARTÍNEZ,
Minister of Chile.
IGNACIO CALDERÓN,
Minister of Bolivia.
JORGE MUNOZ,
Minister of Guatemala.
SERAFIN S. WITHER,
Chargé d' Affaires of Ecuador.

EXHIBIT I.

Statement of Mr. P. H. Cahill, agent of the Panama Railroad Company in Mexico, Central and South America.

PANAMA RAILROAD COMPANY,
On San Juan, May 2, 1905.

HON. J. L. BRISTOW,
*Special Panama Railroad Commissioner,
1800 F street, Washington, D. C.*

DEAR SIR: I hand you inclosed statistics covering the year 1904 from all the ports where the data are obtainable. Wood shipments by sailers, nearly all from the coast, at some distance from ports, are not included in the figures I present. Shipments to South America are also excluded.

Exhibit A gives the articles shipped from the ports mentioned, and the percentage of same to the destinations indicated.

In Exhibit B the articles are grouped together, and the percentage of the total quantity to each of the two routes is also given. I have thought well to also specify the total quantity from all the ports of each article shipped to San Francisco.

It should be borne in mind that the quantities given are in tons of 2,000 pounds each. In both the above-mentioned exhibits I believe you will find all the detail desirable, but I have given the same information, in concentrated form, in Exhibits C and D, which are summaries, respectively, of A and B.

Under the heading "various" a number of odds and ends are included; since no mention is made of sugar or mahogany from Corinto, I presume both are included under various.

I have to correct my memorandum of local charges at Puntarenas, given to you from memory, to the following:

Railroad charges and cartage from San Jose to Puntarenas.....	\$7. 10
Wharfage.....	1. 60
Lighterage.....	2. 30

At San Juan del Sur the lighterage per 1,000 kilos is.....	11. 00
	1. 25

I have been unable to get the lighterage rate Amapala.

The data I have given you from Salvador ports are correct.

At San Jose, or rather on the Guatemala Central Railroad, a gold rate of 1 cent per 100 pounds per mile was to be put into effect on May 1, so that the local expenses from that port would be as follows:

Export duty.....	\$22. 00
Railroad rate per ton from Guatemala City.....	16. 50
Average lighterage for clean and husk coffee.....	2. 85
Wharfage.....	. 54

Lighterage on clean coffee.....	41. 89
	2. 43

These are the charges in gold per 1,000 kilos, alongside which our freight rates to Europe are insignificant.

There is no change in the figures I gave you for Champerico.

At Ocos the rate for some 35 miles and the embarking charges are \$9.50. On account of the difficulties at this port, the tariff is being repeatedly augmented.

Wharfage per 1,000 kilos at San Benito is.....	\$3. 52
At Tonala it is.....	5. 00
Port Angel.....	3. 00
San Blas.....	. 75
Mazatlan.....	. 62
Manzanillo.....	2. 12
Acapulco.....	1. 75

As I have informed you, Pacific Mail steamers have apparently found it unprofitable to call at the coffee ports of Port Angel, San Benito, and Ocos, so that in reality competition commences with the Kosmos Line at Champerico.

You will find this letter rather disjointed, as I am pretty well exhausted from the effort to get the statistics ready, so as to be able to send them to you from Panama.

Yours truly,

P. H. CAHILL.

TABLE A.

Shipments, in tons of 2,000 pounds each, from Mexican and Central American ports mentioned during the year 1904.

		Per cent.	Total.
Port Angel:			
Coffee—			
Europe, via Panama.....	726.80	85.55	
New York.....	74.27	8.75	
San Francisco.....	48.43	5.70	849.50
Skins—			
New York.....	4.30	100.00	4.30
Various—			
San Francisco.....	.18	100.00	.18
			<u>853.98</u>
San Benito:			
Coffee—			
Europe, via Panama.....	223.58	9.41	
Europe, via Straits.....	1,804.91	75.99	
New York.....	37.55	1.59	
San Francisco.....	309.15	13.01	2,375.19
Skins—			
Europe, via Panama.....	1.79	18.17	
Europe, via Straits.....	5.94	60.30	
San Francisco.....	2.12	21.53	9.85
Rubber—			
Europe, via Panama.....	23.02	47.79	
Europe, via Straits.....	15.75	32.70	
New York.....	2.95	6.13	
San Francisco.....	6.44	13.38	48.16
Hides—			
Europe, via Panama.....	1.51	3.47	
Europe, via Straits.....	12.75	29.29	
San Francisco.....	29.26	67.24	43.52
Treasure—			
New York..... \$21,720.00.....		100.00	
Various—			
Europe, via Panama.....	.25	28.41	
Europe, via Straits.....	.42	47.73	
San Francisco.....	.21	23.86	.88
			<u>2,477.60</u>
Ocos:			
Coffee—			
Europe, via Straits.....	1,782.62	86.86	
San Francisco.....	270.82	13.14	2,053.44
Skins—			
Europe, via Straits.....	.06	100.00	.06
Rubber—			
Europe, via Straits.....	.15	100.00	.15
Hides—			
Europe, via Straits.....	26.26	92.33	
San Francisco.....	2.18	7.67	28.44
			<u>2,082.09</u>
Champerico:			
Coffee—			
Europe, via Panama.....	7,133.75	51.28	
Europe, via Straits.....	2,506.40	18.02	
New York.....	730.95	5.25	
San Francisco.....	3,538.98	25.45	13,910.08
Skins—			
Europe, via Panama.....	1.68	19.77	
Europe, via Straits.....	.52	6.11	
New York.....	5.71	67.18	
San Francisco.....	.50	6.94	8.50
Sugar—			
San Francisco.....	104.28	100.00	104.28

Shipments, in tons of 2,000 pounds each, from Mexican and Central American ports mentioned, during the year 1904—Continued.

		Percent.	Total
Champerico—Continued.			
Rubber—			
Europe, via Panama	\$30.56	\$33.05	
Europe, via Straits	2.58	8.02	
New York	9.01	28.03	
			\$32.15
Hides—			
Europe, via Panama	15.41	17.07	
Europe, via Straits	6.37	7.05	
New York	67.70	74.95	
San Francisco	.84	.93	
			90.32
Various—			
Europe, via Panama	0.57	1.32	
Europe, via Straits	33.59	77.88	
New York	.05	.12	
San Francisco	8.92	20.68	
			43.13
			14,188.46
San Jose de Guatemala:			
Coffee—			
Europe, via Panama	8,872.53	48.77	
Europe, via Straits	3,635.63	19.98	
New York	1,378.50	7.58	
San Francisco	4,303.19	23.67	
			18,189.85
Sugar—			
Europe, via Panama	21.25	1.28	
Europe, via Straits	124.07	7.49	
San Francisco	1,511.81	91.23	
			1,657.13
Skins—			
Europe, via Panama	5.85	25.16	
New York	17.13	73.67	
San Francisco	.27	1.17	
			23.25
Rubber—			
Europe, via Panama	197.25	84.35	
New York	36.60	15.65	
			233.85
Hides—			
Europe, via Panama	394.37	38.36	
New York	51.98	11.64	
			446.35
Horns—			
Europe, via Panama	10.32	86.22	
Europe, via Straits	1.65	13.78	
			11.97
Mahogany—			
Europe, via Panama	383.03	30.49	
Europe, via Straits	455.61	36.27	
New York	.18	.02	
San Francisco	417.25	33.22	
			1,256.07
Indigo—			
Europe, via Panama	1.63	72.11	
San Francisco	.63	27.88	
			2.26
Balsam—			
New York	0.12	100.00	
			.12
Cocoa—			
Europe, via Panama	7.02	46.89	
New York	7.95	53.11	
			14.97
Various—			
Europe, via Panama	123.91	47.03	
Europe, via Straits	43.05	16.34	
New York	22.62	8.58	
San Francisco	73.89	28.05	
			263.47
			22,099.29
Acajutla:			
Coffee—			
Europe, via Panama	12,910.58	63.18	
Europe, via Straits	3,274.90	16.02	
New York	191.60	.94	
San Francisco	4,005.67	19.86	
			20,442.76

REPORT OF JOSEPH L. BRISTOW.

255

Shipments, in tons of 2,000 pounds each, from Mexican and Central American ports mentioned, during the year 1904.—Continued.

		Percent.	Total.
Acajutla—Continued.			
Sugar—			
Europe, via Panama	\$1,986.77	\$63.45	
Europe, via Straits	75.10	2.39	
San Francisco	1,074.35	34.16	
			\$3,145.22
Hides—			
Europe, via Panama	40.19	60.59	
New York	16.35	28.32	
San Francisco	1.21	2.00	
			57.75
Skins—			
Europe, via Panama	9.65	60.39	
New York	5.78	36.17	
San Francisco .....	.55	3.44	
			15.98
Rubber—			
Europe, via Panama	4.49	70.82	
New York	1.80	28.39	
San Francisco .....	.05	.79	
			6.34
Balsam—			
Europe, via Panama	27.40	49.75	
Europe, via Straits	16.02	29.08	
New York	11.06	21.17	
			55.08
Indigo—			
Europe, via Panama	49.23	88.51	
Europe, via Straits	5.35	9.62	
New York	1.04	1.87	
			55.62
Treasure—			
New York	\$20,000.00	93.02	
San Francisco	1,500.00	6.98	
	21,500.00		
Various—			
Europe, via Panama	20.86	21.35	
Europe, via Straits	2.22	2.27	
New York	69.55	71.21	
San Francisco	5.04	5.17	
			97.67
			23,476.41
La Libertad:			
Coffee—			
Europe, via Panama	5,068.96	70.34	
Europe, via Straits	739.92	10.27	
New York	263.58	3.65	
San Francisco	1,134.56	15.74	
			7,207.02
Sugar—			
Europe, via Panama	11.10	22.63	
San Francisco	37.96	77.37	
			49.06
Skins—			
New York	5.37	100.00	
			5.37
Rubber—			
Europe, via Panama	0.71	16.91	
New York	3.49	83.09	
			4.20
Hides—			
Europe, via Panama	8.50	25.97	
New York	24.49	74.03	
			33.08
Indigo—			
Europe, via Panama	26.03	95.52	
New York	1.22	4.48	
			27.25
Balsam—			
New York	13.35	100.00	
			13.35
Various—			
Europe, via Panama	3.01	16.21	
New York .....	.24	1.30	
San Francisco	15.32	82.49	
			18.57
			7,357.90

Shipments, in tons of 2,000 pounds each, from Mexican and Central American ports mentioned during the year 1904.—Continued.

		Percent.	Total.
Lt. Union:			
Coffee—			
Europe, via Panama.....	\$3,786.90	\$40.14	
Europe, via Straits.....	4,548.46	34.22	
New York.....	28.65	.41	
San Francisco.....	1,059.39	11.23	\$9,433.40
Indigo—			
Europe, via Panama.....	64.47	81.75	
Europe, via Straits.....	14.22	18.03	
San Francisco.....	.17	.22	78.86
Skins—			
Europe, via Panama.....	0.25	6.25	
New York.....	3.38	84.50	
San Francisco.....	.37	9.25	4.00
Rubber—			
Europe, via Panama.....	8.16	29.83	
Europe, via Straits.....	.85	3.11	
New York.....	18.29	66.88	
San Francisco.....	.05	.18	27.35
Hides—			
Europe, via Panama.....	2.85	14.29	
New York.....	15.27	76.54	
San Francisco.....	1.83	9.17	19.95
Mahogany—			
Europe, via Straits.....	73.00	100.00	73.00
Treasure—			
Europe, via Panama.....	2.71	86.03	
San Francisco.....	.44	13.97	3.15
Treasure—			
Europe, via Panama.....	\$314,063	92.13	
New York.....	14,600	4.28	
San Francisco.....	12,256	3.59	
	340,922		9,639.71
Amapala:			
Coffee—			
Europe, via Panama.....	49.58	100.00	49.58
Concentrates (ore)—			
Europe, via Panama.....	5.24	.71	
New York.....	318.99	43.17	
San Francisco.....	414.61	56.12	738.84
Treasure—			
Europe, via Panama.....	\$97,061	30.34	
New York.....	222,897	69.66	
	319,958		
Various—			
Europe, via Panama.....	1.52	.89	
New York.....	43.87	25.31	
San Francisco.....	127.92	73.81	173.31
Skins—			
Europe, via Panama.....	8.21	36.33	
New York.....	9.98	44.16	
San Francisco.....	4.41	19.51	22.60
Rubber—			
Europe, via Panama.....	3.14	52.33	
New York.....	2.86	47.67	6.00
Hides—			
Europe, via Panama.....	186.12	78.09	
New York.....	52.21	21.91	238.33
			1,228.66

Shipments, in tons of 2,000 pounds each, from Mexican and Central American ports mentioned, during the year 1904—Continued.

		Per cent.	Total.
Corinto:			
Coffee—			
Europe, via Panama.....	\$5,949.77	\$56.42	
Europe, via Straits.....	4,119.90	39.05	
New York.....	323.83	3.06	
San Francisco.....	155.29	1.47	
			\$10,748.79
Various—			
Europe, via Panama.....	707.78	27.96	
Europe, via Straits.....	845.96	29.60	
New York.....	25.26	.88	
San Francisco.....	1,188.54	41.56	
			2,857.24
Treasure—			
Europe, via Panama.....	\$109,885	62.33	
New York.....	58,176	32.99	
San Francisco.....	8,250	4.68	
	176,311		
Skins—			
Europe, via Panama.....	0.31	.39	
Europe, via Straits.....	.15	.19	
New York.....	74.03	93.16	
San Francisco.....	4.97	6.26	
			79.46
Rubber—			
Europe, via Panama.....	7.09	7.10	
New York.....	92.76	92.90	
			99.95
Hides—			
Europe, via Panama.....	3.39	1.47	
New York.....	226.88	98.11	
San Francisco.....	1.10	.42	
			231.37
			13,816.91
Puntarenas:			
Coffee—			
Europe, via Panama.....	1,370.42	73.85	
New York.....	19.64	1.06	
San Francisco.....	465.53	25.09	
			1,855.69
Skins—			
New York.....	25.59	94.57	
San Francisco.....	1.47	5.43	
			27.06
Rubber—			
New York.....	\$34.52	100.00	
			34.52
Hides—			
New York.....	\$42.14	96.45	
San Francisco.....	1.55	3.55	
			43.69
Pearl shells—			
Europe via Panama.....	\$119.26	67.08	
New York.....	54.25	30.51	
San Francisco.....	4.27	2.41	
			177.73
Mahogany—			
Europe via Panama.....	\$280.00	31.25	
San Francisco.....	616.00	68.75	
			896.00
Various—			
Europe via Panama.....	\$0.19	.44	
New York.....	1.23	2.85	
San Francisco.....	41.75	96.71	
			43.17
Treasure—			
Europe via Panama.....	\$8,715.00	4.49	
New York.....	84,508.00	43.56	
San Francisco.....	100,774.00	51.95	
	193,997.00		
			3,077.91

On board steamship *San Juan*, off Panama coast, May 2, 1905.

P. H. CARILL.

TABLE 3.

Shipments, in tons of 2,000 pounds each, of articles mentioned, from the ports stated, by the routes indicated, during 1904.

From—	Via Panama to Europe and New York.	Via Straits to Europe.	Total.
Coffee:			
Port Angel.....	801.07		801.07
San Benito.....	261.13	1,804.91	2,066.04
Ocos.....		1,782.62	1,782.62
Champerico.....	7,804.70	2,500.40	10,371.10
San Jose.....	10,251.03	3,635.63	13,886.66
Acajutla.....	13,102.18	3,274.90	16,377.08
La Libertad.....	5,332.54	739.92	6,072.46
La Union.....	3,825.55	4,548.46	8,374.01
Amapala.....	49.58		49.58
Corinto.....	6,273.60	4,119.50	10,393.50
Puntarenas.....	1,390.06		1,390.06
Total.....	49,151.44	22,412.74	71,564.18
Per cent.....	68.68	31.32	
Coffee to San Francisco.....			15,351.11
Total coffee.....			86,915.29
Sugar:			
San Jose.....	21.25	124.07	145.32
Acajutla.....	1,995.77	75.10	2,070.87
La Libertad.....	11.10		11.10
Total.....	2,028.12	199.17	2,227.29
Per cent.....	91.06	8.94	
Sugar to San Francisco.....			2,728.40
Total sugar.....			4,955.69
Skins:			
Port Angel.....	4.30		4.30
San Benito.....	1.79	5.94	7.73
Ocos.....		.06	.06
Champerico.....	7.39	.52	7.91
San Jose.....	22.98		22.98
Acajutla.....	15.43		15.43
La Libertad.....	5.37		5.37
La Union.....	3.63		3.63
Amapala.....	18.19		18.19
Corinto.....	74.34	.15	74.49
Puntarenas.....	25.59		25.59
Total.....	179.01	6.67	185.68
Per cent.....	96.41	3.59	
Skins to San Francisco.....			14.75
Total skins.....			200.43
Rubber:			
San Benito.....	25.97	15.75	41.72
Ocos.....		.15	.15
Champerico.....	29.57	2.58	32.15
San Jose.....	233.85		233.85
Acajutla.....	6.29		6.29
La Libertad.....	4.20		4.20
La Union.....	26.45	.85	27.30
Amapala.....	6.00		6.00
Corinto.....	99.85		99.85
Puntarenas.....	34.52		34.52
Total.....	466.70	19.33	486.03
Per cent.....	96.02	3.98	
Rubber to San Francisco.....			6.54
Total rubber.....			492.57
Hides:			
San Benito.....	1.51	12.75	14.26
Ocos.....		26.26	26.26
Champerico.....	53.11	6.37	59.48
San Jose.....	446.35		446.35
Acajutla.....	50.54		50.54
La Libertad.....	33.08		33.08
La Union.....	18.12		18.12
Amapala.....	238.33		238.33

REPORT OF JOSEPH L. BRISTOW.

259

Shipments, in tons of 2,000 pounds each, of articles mentioned, from the ports stated, by the routes indicated, during 1904—Continued.

From—	Via Panama to Europe and New York.	Via Straits to Europe.	Total.
Hides—Continued.			
Corinto.....	230.27		230.27
Puntarenas.....	42.14		42.14
Total.....	1,149.45	45.38	1,194.83
Per cent.....	96.21	3.79	
Hides to San Francisco.....			37.97
Total hides.....			1,232.80
Balsam:			
San Jose.....	.12		.12
Acajutla.....	39.06	16.02	55.08
La Libertad.....	13.35		13.35
Total.....	52.53	16.02	68.55
Per cent.....	76.62	23.38	
Indigo:			
San Jose.....	1.63		1.63
Acajutla.....	50.27	5.35	55.62
La Libertad.....	27.25		27.25
La Union.....	64.47	14.22	78.69
Total.....	143.62	19.57	163.17
Per cent.....	88.91	11.09	
Indigo to San Francisco.....			.80
Total indigo.....			163.97
Mahogany:			
San Jose.....	383.21	455.61	838.82
La Union.....		73.00	73.00
Puntarenas.....	280.00		280.00
Total.....	663.21	528.61	1,191.82
Per cent.....	55.65	44.35	
Mahogany to San Francisco.....			1,033.25
Total mahogany.....			2,225.07
Horns:			
San Jose.....	10.32	1.65	11.97
Per cent.....	86.21	13.79	
Pearl shells:			
Puntarenas.....	173.51		173.51
Per cent.....	100		
Pearl shells to San Francisco.....			4.27
Total pearl shells.....			177.78
Concentrates (ore):			
Amapala.....	324.23		324.23
Per cent.....	100		
Concentrates to San Francisco.....			414.61
Total concentrates.....			738.84
Treasure:			
La Union.....	2.71		2.71
Per cent.....	100		
Treasure to San Francisco.....			.44
Total treasure.....			3.15
Treasure:			
San Benito.....	\$21,720.00		
Acajutla.....	20,000.00		
La Union.....	328,666.00		
Amapala.....	319,958.00		
Corinto.....	168,061.00		
Puntarenas.....	93,223.00		
Total.....	\$951,628.00		
Per cent.....	100		
To San Francisco.....	\$122,780.00		
Total treasure.....	\$1,074,408.00		

260

REPORT OF JOSEPH L. BRISTOW.

Shipments, in tons of 2,000 pounds each, of articles mentioned, from the ports stated, by the routes indicated, during 1904—Continued.

From—	Via Panama to Europe and New York.	Via Straits to Europe.	Total.
Cocoa:			
San Jose.....	\$14.97		\$14.97
Per cent.....	100		
Various:			
San Benito.....	.25	\$0.12	.67
Champerico.....	.62	33.50	34.26
San Jose.....	146.53	43.05	189.58
Acajutla.....	90.41	2.22	92.63
La Libertad.....	3.25		3.25
Amapala.....	45.39		45.39
Corinto.....	823.04	845.86	1,668.90
Puntarenas.....	1.42		1.42
Total.....	1,110.91	925.14	2,036.05
Per cent.....	54.56	45.44	
Various to San Francisco.....			1,461.77
Total various.....			3,497.82

On board steamship *San Juan*, off Panama coast, May 2, 1905.

P. H. CAHILL.

TABLE C.

Summary of A, showing total shipments from the ports mentioned, in tons of 2,000 pounds each, to destinations indicated during 1904.

From—	Via Panama to Europe and New York.	Via Straits to Europe.	Total.	Via Panama.	Via Straits.
				Per cent.	Per cent.
Port Angel.....	805.37		805.37	100.00	
San Benito.....	290.65	1,839.77	2,130.42	13.65	86.35
Ocos.....		1,809.09	1,809.09		100.00
Champerico.....	7,986.39	2,549.46	10,534.85	75.80	24.20
San Jose.....	11,532.24	4,260.01	15,792.25	73.03	26.97
Acajutla.....	15,355.95	3,373.59	18,729.54	81.99	18.01
La Libertad.....	5,430.14	739.92	6,170.06	88.01	11.99
La Union.....	3,940.83	4,636.53	8,577.46	45.95	54.05
Amapala.....	681.72		681.72	100.00	
Corinto.....	7,501.10	4,965.91	12,467.01	60.17	39.83
Puntarenas.....	1,947.24		1,947.24	100.00	
Total from all ports to San Francisco.....	55,470.73	24,174.28	79,645.01	69.65	30.35
			21,053.91		
			100,698.92		

Treasure from all ports via Panama.....	\$951,628.00
Treasure from all ports to San Francisco.....	122,780.00
	1,074,408.00

On board steamship *San Juan*, off Panama coast, May 2, 1905.

P. H. CAHILL.

TABLE D.

Summary of B, showing shipments, in tons of 2,000 pounds each, of the articles named, by the routes mentioned, during 1904.

Article.	Via Panama to Europe and New York.	Via Straits to Europe.	Total.	Via Panama.	Via Straits.
				Per cent.	Per cent.
Coffee.....	49,181.44	22,412.74	71,594.18	68.68	31.32
Sugar.....	2,028.12	199.17	2,227.29	91.06	8.94
Skins.....	179.01	6.67	185.68	96.41	3.59
Rubber.....	406.70	19.33	426.03	95.02	4.98
Hides.....	1,149.45	45.38	1,194.83	96.21	3.79
Balsam.....	82.53	16.02	98.55	76.62	23.38
Indigo.....	143.62	19.57	163.19	88.91	11.09
Mahogany.....	663.21	528.61	1,191.82	55.65	44.35
Horns.....	10.32	1.65	11.97	86.21	13.79
Pearl shells.....	173.51	.....	173.51	100.00	.....
Concentrates (ore).....	324.23	.....	324.23	100.00	.....
Treasure.....	2.71	.....	2.71	100.00	.....
Cocoa.....	14.97	.....	14.97	100.00	.....
Various.....	1,110.91	925.14	2,036.05	54.56	45.44
Total shipments of all above articles to San Francisco.....	55,470.73	24,174.28	79,645.01	69.65	30.35
			21,053.91		
			100,698.92		

Treasure via Panama (100 per cent).....	\$951,628.00
Treasure to San Francisco.....	122,780.00
	1,074,408.00

P. H. CAHILL.

On board steamship *San Juan*, off Panama coast, May 2, 1905.

In the following statement of the principal shipments from Central American and Mexican ports, coffee freight rates have been calculated per ton of 1,000 kilos, and the kilo taken at 2½ pounds, so that 1,000 kilos are equivalent to 2,200 pounds. In the tariffs the rates to New York and San Francisco are given per ton of 2,000 pounds, but, in order that the comparison of rates may be precise, the proportion per 1,000 kilos, or 2,200 pounds is given.

Sterling has been calculated at 4 shillings to the United States dollar, or \$5 to the pound sterling.

Railroad and other local charges are made up based on, more or less, the actual rate of exchange; the rate of exchange is subject to constant fluctuations.

PUNTARENAS (COSTA RICA).

San Jose, the capital, is the center of the coffee district, about 85 miles from Puntarenas, connection being by railroad, except a gap of 15 miles, over which haul is made by ox carts. The average shipments per season (September 30 to October 1 [to May 1?]) amount to 50,000 sacks, of which about 30,000 go to San Francisco, and 20,000 to Europe and New York, all over Panama Railroad, as Costa Ricans consider their coffee too valuable to be shipped to Europe by the longer Straits route.

Freight rate, San Jose to Puntarenas.....	\$7.10
Wharfage, Puntarenas, Government pier.....	1.60
Embarking, lighters propelled by hand.....	2.30

Local charges per 1,000 kilos, United States gold.....	11.00
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I have questioned wharfage, as it seems too high, and I have taken it from memory.

Freight rate.

Clean coffee, Europe via Panama.....	\$15.00
Clean coffee, Europe via Straits.....	12.50
Husk coffee, Europe via Panama.....	20.00
Husk coffee, Europe via Straits.....	16.25
Clean and husk coffee, New York.....	11.00
Clean and husk coffee, San Francisco.....	8.00

About 37,000 sacks, far above the average will this season be shipped to Europe and New York, because land slides rendered the road to Port Limon intransitable for a couple of months.

From 6,000 to 10,000 tons of mahogany and cedar logs are shipped yearly mostly by sailers, and the greater part of the balance by the Straits, very little going via Panama. Most of this is loaded at a considerable distance from the port, and sailers only can give the necessary time to embark.

Hides, skins, pearl shells, and gold dust form the rest of the shipments from this port.

SAN JUAN DEL SUR (NICARAGUA).

Cedar and mahogany logs, also loaded at some distance from the port, form the great bulk of the shipments from this port. On account of the suspension of traffic via Greytown, a little rubber, hides, and coffee are now coming to San Juan. There is no railroad to the interior and embarking is effected from a small wharf, or through the surf. Sailers take nearly all the logs, the same as in Puntarenas.

There has been so little business through this port that I do not recall the local charges, but, owing to the rough weather that prevails and to the hand propulsion lighterage must be, at least, as expensive as at Puntarenas. As at Puntarenas, the launches are owned by a local company.

For coffee rates, see Corinto.

CORINTO (NICARAGUA).

Coffee shipments from this port are about 160,000 bags per season, or nearly all produced in Nicaragua. On account of the lateness of the crop, the European markets being generally overstocked with mild-grade coffee before Nicaragua shipments commence, and because of the inferior-grade coffee produced, more advantage is taken here of the lower rate via the Straits than at other Central American ports; the longer time en route frequently avoids to shippers the payment of storage charges. Some 6,000 or 7,000 sacks go yearly to New York and perhaps 10,000 bags to San Francisco, the balance being shipped to Europe, about 40 per cent via Magellan and 60 per cent via Panama.

The railroad rate from Granada to Corinto, 119 miles.....	\$11.18
Embarking charge in port.....	2.20
Export duty.....	8.80
Total.....	22.18

	Freight rate.
Clean coffee, Europe via Panama.....	\$16.25
Clean coffee, Europe via Straits.....	13.75
Husk coffee, Europe via Panama.....	22.50
Husk coffee, Europe via Straits.....	18.75
Clean and husk coffee, New York.....	15.40
Clean and husk coffee, San Francisco.....	8.80
Landing general merchandise, imports.....	2.20

Three lighter companies, all owned by local capitalists.

Besides coffee the exports are cedar and mahogany logs, hides, skins, rubber, and treasure.

AMAPALA (HONDURAS).

About 3,000 sacks of coffee are shipped each season all to Europe via Panama. I do not believe that there is any export duty. There is no railroad to the interior. I do not recall the local charges. There are two lighter companies, owned by Germans, residing in the port.

The other exports are treasure and concentrates, mostly to New York; hides, skins, and rubber, to New York and Europe; dyewoods, generally to Hamburg, via the Straits.

Coffee rates same as from Corinto.

LA UNION (SALVADOR).

About 75,000 sacks of coffee are shipped annually from this port.

Coffee is hauled in carts from the interior. This, like Corinto, is a landlocked port, and as in Corinto, the coffee is taken from warehouses on men's backs and put into lighters on the beach. The lighters are mostly dugouts or canoes. There are two lighter companies, one owned by local capitalists and the other by an Italian residing in the interior of Salvador.

Embarking charges.....	\$2.76
Landing of imports, general merchandise.....	1.75

For export duties, etc., see under Acajutla.

The largest shipper through La Union wants to have his coffee arrive late, so as to be on the market when most of the mild grades are sold, and, to avoid storage charges and get lowest freight rate, he ships nearly all his coffee by the Straits. For this reason about 60

per cent of the coffee to Europe goes via Magellan. Very little coffee is shipped to San Francisco and less to New York.

Hides, skins, rubber, indigo, and balsam form the balance of the shipments from this port.

LA LIBERTAD (SALVADOR).

This, like all the coffee ports to the north thereof, is an open roadstead. About 55,000 sacks of coffee, hauled from the interior in ox carts, are shipped through this port. I have no data at hand relative to the cost of wharfage and embarking, but these are probably the same as in Acajutla, with which port it is competing for imports and exports.

About 85 per cent of the coffee for Europe goes via Panama. Only insignificant quantities are shipped to New York and San Francisco.

See under Acajutla for export duty, freight rates, etc.

A good deal of the importation for San Salvador, the capital, is brought through this port, because there is a custom-house there, whereas the custom-house of Acajutla is at Sonsonate, about 16 miles inland; time is gained by having goods cleared at the port, and La Libertad continues to prosper in spite of the railroad facilities of Acajutla.

One lighter company, all native capital.

ACAJUTLA (SALVADOR).

Coffee shipments aggregate about 260,000 sacks yearly. Of this about 220,000 go to Europe, 80 per cent of it via Panama. About 35,000 sacks are shipped to San Francisco and 5,000 to New York.

Railroad rate, Santa Ana to Acajutla, 67 miles.....	\$7.80
Export duty (in addition to which there is a stamp duty of \$3.50 per set of bills of lading).....	11.00
Wharfage.....	1.15
Lighterage.....	3.50
Total.....	23.45

Freight rate.

Clean coffee, Europe via Panama.....	\$16.25
Clean coffee, Europe via Straits.....	13.75
Husk coffee, Europe via Panama.....	22.50
Husk coffee, Europe via Straits.....	18.75
Clean and husk coffee, New York.....	15.40
Clean and husk coffee, San Francisco.....	8.80

The railroad is owned by English capitalists, who also own the lighters, and the same parties recently leased the wharf, paying 12 per cent on nominal capital, or about 36 per cent on the amount invested, the stock having been watered up to three times the actual investment.

SAN JOSE (GUATEMALA).

Some 220,000 sacks of coffee are exported through this port, of which about 72 per cent goes to Europe, about 70 per cent of which latter goes via Panama. Shipments to New York and San Francisco are on the increase. On account of the low rate of freight to San Francisco, the inferior qualities from this and other ports, which could not stand the higher rates to New York and Europe, go there (San Francisco).

Export duty.....	\$22.30
Railroad rate, Guatemala City to San Jose, 75 miles.....	16.50
Wharfage (from memory).....	.64
Lighterage (also from memory).....	2.85
Total.....	41.89

Freight rates from this and other Guatemala ports the same as from Corinto and Acajutla.

The Pacific Mail Steamship Company holds a controlling interest in the launch company.

The wharf is owned by native capitalists.

The Guatemala Central Railroad, which is owned by the Pacific Improvement Company, New York and San Francisco, has a concession under which it can collect freights in gold, the maximum from Guatemala City to the port to be 63 cents per 100 pounds, \$13.86 per ton of 1,000 kilos, or over 18 cents per ton per mile. The gold rate will be put into effect for next coffee season.

CHAMPERICO (GUATEMALA).

Coffee shipments during the past couple of seasons were greatly diminished, owing to the volcanic eruption, but this season they will aggregate about 300,000 sacks. The coffee goes, in more or less the same proportions as from San Jose, to the destinations named under latter port.

The railroad tariff is 10 cents Guatemala currency—10.13 cents United States currency—per mile for every 100 pounds.

As the coffee district is about 30 miles from the coast, the rate for that distance is.....	\$6.60
Wharfage.....	.42
Lighterage.....	1.27
Total.....	8.29

As the duty on coffee is the same from all Guatemala ports, see under San Jose for same. The Occidental Railroad runs from Champerico to San Felipe, and a branch connects at Mazatenango with the Guatemala Central. It is controlled by German and native capitalists. The railroad owns the wharf and lighters.

Besides coffee, the exports from this and other Guatemala ports are hides, skins, rubber, some mahogany, and a few other articles of minor importance. Sugar exports through San Jose are now acquiring importance.

OCOS (GUATEMALA).

The volcanic eruption about two and a half years ago all but destroyed the wharf here, so that coffee is now being embarked through the surf. Since the eruption very little has been shipped until this season, when about 100,000 sacks will be shipped. Formerly 150,000 sacks formed the average of annual shipments.

Ordinarily the coffee shipped through Ocos would be distributed in more or less the same way as shipments through San Jose, but, owing to the slow work, Pacific Mail ships have not called there during the past two seasons, and I do not suppose they will go there this year, so that Kosmos steamers are taking all the coffee via the Straits.

I understand that the embarking through the surf is charged for at the rate of \$3 United States currency per ton.

About 35 miles of railroad runs to the interior, close to the Mexican frontier. There is litigation between the native stockholders and the Germans who gave the capital for the construction; it is in possession of the latter.

The export duties are the same as from San Jose, and the rates to Europe and United States ports are the same as given under Corinto and Acajutla.

SAN BENITO (MEXICO).

The volcanic eruption already referred to unfavorably affected the coffee districts which ship through this port, but this season shipments will reach normal, say 40,000 sacks. A good deal of the coffee is shipped to Mazatlan and the Gulf ports—those on the Gulf of California. The greater part, however, is shipped by the Straits to Europe, as Pacific Mail steamers, on account of slow work, have found it unprofitable to call there. Some 5,000 or 6,000 sacks will probably find their way via Panama to Europe, shipped on Mexican steamers to Acapulco, where the coffee is transhipped to Pacific Mail steamers, the cost of the haul to and transfer at Acapulco being about \$6.50 United States currency.

There is no duty on the export coffee of Mexico.

The embarking is done through the surf, and costs about \$1.50 per ton.

On account of the detention to steamers at this port, the rate of freight is higher than from any other coffee port, viz:

Clean coffee, Europe via Panama.....	\$17.50
Clean coffee, Europe via Straits.....	15.00
Husk coffee, Europe via Panama.....	23.75
Husk coffee, Europe via Straits.....	20.00

Rates to New York and San Francisco are the same as from Central American ports, or, respectively, \$15.40 and \$8.80.

PORT ANGEL (MEXICO).

As both the Pacific Mail and Kosmos steamers have discontinued calls at Port Angel, the 16,000 sacks of coffee are taken by the Mexican steamers, about 4,000 to upper Mexican ports, and the balance transhipped at Acapulco to Pacific Mail steamers, the haul and transfer at Acapulco costing about \$6 United States currency. Some 12,000 sacks find their way in this manner to Europe via Panama.

Embarking done through the surf does not cost less than \$1.50 per ton.

Freight rates to Europe and the United States the same as those from Central American ports.

There is no railroad to the interior.

Lighters are owned by local capitalists.

MANZANILLO (MEXICO).

The coffee produced about Colima is nearly all consumed in the district and balance is shipped to upper Mexican ports on the Pacific.

The Mexican Government is constructing a harbor here, similar to that at Salina Cruz, but on a smaller scale. The work is being done by an American contractor. A railroad connects the port with Colima.

Launches are owned by local capitalists and by the American contractor.

SAN BLAS (MEXICO).

A couple of large plantations are in the course of formation, but little or no coffee will be exported for a couple of years.

This is a rough port and there is little business therewith.

Launches are owned by local capitalists and are propelled by hand.

No coffee is produced farther north.

GENERAL.

Tugboats are utilized to haul launches at La Libertad, Acajutla, San Jose, and Champerico. Hand power is used to propel them in the balance of the coffee ports.

OUTLETS ON THE ATLANTIC.

All the Latin republics north of Panama are ambitious to have an outlet on the Atlantic.

A railroad line connects the capital of Costa Rica with Port Limon. This is owned by British capitalists, but has been leased for a term of years to Mr. Keith, of the United Fruit Company, who will commence to operate it next July. The Government of Costa Rica has built a line from the capital toward the Pacific, and, with the exception of a 15-mile gap between Santo Domingo and Esparta, there is actually interoceanic communication across Costa Rica.

Nicaragua has projected a 90-mile line from San Miguelito, on Lake Nicaragua, to a sheltered harbor at Monkey Point, on the Atlantic. The railroad belonging to the Nicaragua Government, but leased to private individuals, connecting Corinto with Granada, with the Government steamers on the lake, will, when the projected railroad is completed, complete the interoceanic communication through Nicaragua.

There is a short line from Puerto Cortez inland, and Honduras is desirous of having it extended to Tegucigalpa, the capital.

Salvador has had surveys made to connect by rail Santa Ana with Zacapa, on the Northern Railroad of Guatemala. This would give Salvador an Atlantic outlet.

Work on the Northern Railroad of Guatemala is being continued by an American company, which has guaranteed to terminate the 65 miles of heavy construction in three years, so that there will be an interoceanic route from San Jose on the Pacific to Puerto Barrios on the Atlantic.

Mexico has the Tehuantepec, as well as other lines, to the Atlantic.

EXHIBIT J.

Copy of list of questions submitted to the Chamber of Commerce of San Diego, Cal., and answers thereto.

SAN DIEGO, CAL., March 17, 1905.

What kind of freight originates in the vicinity of San Diego for shipment to the eastern part of the United States and Europe?

What part of this freight could be successfully transported by the way of Panama?

Estimate the amount of each article.

What is the freight rate now charged by the railroads for each article of this freight to Boston, New York, Philadelphia, Baltimore, and New Orleans?

What are the harbor facilities at San Diego?

How many wharves and who own or control them?

What steamship lines make this port, and how often do their vessels call?
 What are the principal articles of freight shipped to San Diego from points east of the Allegheny Mountains?
 Estimate the amount of each article.
 What are the freight rates charged by the railroads on each article?
 What is the time consumed in transporting freight by rail from San Diego to New York?
 What are the principal articles of freight that are shipped from the Mississippi Valley to San Diego?
 Estimate the amount of each article.
 What are the freight rates charged on each article?
 What articles of merchandise are shipped from San Diego to Europe and the eastern coast of the United States by the way of the Straits of Magellan?
 What steamship lines handle this business, and what are the rates charged?
 What are the principal articles of merchandise received at San Diego from Europe and the eastern part of the United States by the way of the Straits of Magellan?
 What are the rates charged for such freight?
 Would it be practicable to ship such articles of freight by the way of Panama? If not, why not?
 What are the freight rates by rail in carload lots between San Diego and Los Angeles each way?
 What are the freight rates in less than carload lots?
 What are the articles of freight that are exported from San Diego and received at San Diego that it would be practicable to ship by the way of Panama?
 Estimate the amount of each article of such freight, and the period during the year when it would be most likely to be handled.
 Please make any statement not covered by the above questions that you think may have a bearing on the question of transportation by the way of Panama.

(Signed)

J. L. BRISTOW,
Special Panama Railroad Commissioner.

To the PRESIDENT OF CHAMBER OF COMMERCE.

SAN DIEGO CHAMBER OF COMMERCE,
 San Diego, Cal., April 12, 1905.

HON. JOSEPH L. BRISTOW,
Special Commissioner, U. S. War Department,
 Washington, D. C.

SIR: We would reply to the questions submitted by you to our chamber of commerce as follows:

Question. What kind of freight originates in the vicinity of San Diego for shipment to the eastern part of the United States and Europe?

Answer. Principally oranges, lemons, raisins, olives, olive oil, honey, and dried fruits.

Question. What part of this freight could be successfully transported by the way of Panama?

Answer. Nearly all of it.

Question. Estimate the amount of each article.

Answer. Five hundred carloads of lemons, 125 of oranges, 100 of honey, 125 of raisins, and 25 dried fruit.

Question. What is the freight rate now charged by the railroads for each article of this freight to Boston, New York, Philadelphia, Baltimore, and New Orleans?

Answer. Oranges, \$1.25 per 100 pounds; lemons, \$1; raisins, \$1.25; honey, \$1.25.

Question. What are the harbor facilities of San Diego?

Answer. The harbor is amply large for any conceivable commercial purposes. It has about 17 linear miles of harbor front with a depth of water 30 feet and over at low tide. All of this frontage is more or less practicable for commercial purposes. Immediately in front of the cities of San Diego and National City there are at least 5 miles of water front available for wharf purposes. The harbor will admit vessels of deepest draft, the entrance having 30 feet in the channel at low tide. Steamers of the American-Hawaiian Line, drawing 27 feet of water and some of them of 10,000 tons capacity, are at the present time habitually using the harbor.

Question. How many wharves, and who own or control them?

Answer. At the present there are three principal commercial wharves, owned, respectively, by Spreckels Brothers' Commercial Company, Santa Fe Railroad Company, and Pacific Coast Steamship Company, but all are public wharves.

These wharves were constructed about twenty years ago under franchises granted by the city of San Diego, but all of these franchises expire in the year 1906, and the control of the water front then passes to a State board of harbor commissioners, which has plenary power in the matter of fixing rates.

The facilities at the present time would accommodate from twelve to fifteen large steamers at any one time, besides at least the same number of smaller vessels.

Question. What steamship lines make this port, and how often do their vessels call?

Answer. The Hawaiian-American Steamship Company, plying between New York, San Francisco, and Hawaii; the Pacific Coast Steamship Company, plying on the Pacific coast of the United States.

Question. What are the principal articles of freight shipped to San Diego from points east of the Allegheny Mountains?

Answer. All articles of general merchandise.

Question. Estimate the amount of each article.

Answer. Impossible to make an estimate of each article. An average of twelve loaded freight cars arrive each day, estimated that one-third are loaded with eastern goods—bring 60,000 tons during the year.

Question. What are the freight rates charged by the railroads on each article?

Answer. See comparison of freight rates furnished herewith.

Question. What is the time consumed in transporting freight by rail from San Diego to New York?

Answer. Averages thirty-one days by rail, sixty days by steamship.

Question. What are the principal articles of freight that are shipped from the Mississippi Valley to San Diego?

Answer. Very little at present, but for the two and a half years immediately preceding the formation of the combine entered into between the Southern Pacific Railroad Company and the Santa Fe Company, which combine closed this harbor to all foreign trade other than Baja California, Mexico, there was received at this port by rail from the Southern States 99,888 bales of cotton, valued at \$2,258,000.

Question. Estimate the amount of each article.

Answer. Nothing worth noting.

Question. What articles of merchandise are shipped from San Diego to Europe and the eastern coast of the United States by the way of the Straits of Magellan?

Answer. None at present from this port.

Question. What steamship lines handle this business, and what are the rates charged?

Answer. Answered in No. 14.

Question. What are the principal articles of merchandise received at San Diego from Europe and the eastern part of the United States by the way of the Straits of Magellan?

Answer. Answered in No. 14.

Question. What are the rates charged for such freight?

Answer. Answered in No. 14.

Question. Would it be practicable to ship such articles of freight by the way of Panama? If not, why not?

Answer. It is practicable to ship 95 per cent of all freight between this port and the East via Panama Railroad if the road is opened on equal terms to all shippers and all ships.

Question. What are the freight rates by rail in carload lots between San Diego and Los Angeles each way?

Answer. Ranges from 10 to 20 cents per 100 pounds. Average, 16 cents. Distance, 125 miles.

Question. What are the freight rates in less than carload lots?

Answer. Same.

Question. What are the articles of freight that are exported from San Diego and received at San Diego that it would be practicable to ship by the way of Panama?

Answer. All articles named heretofore in this reply.

Question. Estimate the amount of each article of such freight and the period during the year when it would be most likely to be handled.

Answer. Estimates have been given as near as may be in foregoing answers.

Question. Please make any statement not covered by the above questions that you think may have a bearing on the question of transportation by the way of Panama.

Answer. The Panama Railroad having been in the past an exclusive monopoly managed wholly in the interests of the transcontinental railroad combine, has been of no benefit to the people of the Pacific coast; all its benefits have inured to the corporations. The Pacific Mail's monopoly of this road has been used to buttress the exorbitant railroad freight charges. Now that the road has become the property of the people of the United States we feel that it should be opened to all shippers at equal rates. So opened it would be of great benefit to the Pacific coast.

We also inclose copy of a resolution adopted by the board of directors of the San Diego Chamber of Commerce at their regular weekly meeting held March 24, 1905, as well as tonnage statement prepared at our request by the collector of customs for San Diego and comparison of rail and water freight routes.

H. P. WOOD,

Secretary San Diego Chamber of Commerce.

(Inclosures:)

Resolution San Diego Chamber of Commerce.

Statement of tonnage furnished by United States customs service.

Comparison rail and water freight rates.

Resolved, That the Chamber of Commerce of San Diego, Cal., favors the opening of the Panama Railway to all shippers at equal rates and that no preferential rate be made.

I hereby certify that the foregoing is a true and correct copy of a portion of the minutes of the regular weekly meeting of the board of directors of the San Diego Chamber of Commerce held Friday, March 24, 1905.

JOHN S. AKERMAN, President.

Attest:

H. P. WOOD, Secretary.

Statement of tonnage landed at San Diego, Cal., from certain vessels arrived from New York and Philadelphia.

From New York (2,240 pounds per ton):	Tonnage.
March 24, 1904, American steamship <i>Alaskan</i>	1,650
June 4, 1904, American steamship <i>American</i>	1,585
September 8, 1904, American steamship <i>Texan</i>	1,272
December 2, 1904, American steamship <i>Nebraskan</i>	1,391
December 7, 1904, American steamship <i>Alaskan</i>	416
January 10, 1905, American steamship <i>Arizonian</i>	1,154
February 10, 1905, American steamship <i>Hawaiian</i>	1,219
February 27, 1905, American steamship <i>Oregonian</i>	812
From Philadelphia:	
July 8, 1904, American bark <i>Willscott</i>	1,749

Furnished: Iron pipe and manufactures of iron and steel.....	Packages.
Collector: General merchandise.....	37,483
Coal (tons).....	49,915
March 27, 1905, American steamship <i>American</i> , tonnage landed.....	3,222
Total iron and general merchandise (tons).....	800
	12,058

Comparison of freight rates by water and by rail between San Diego, Cal., and New York and eastern points generally.

Articles.	By water (rate per 100 pounds).	By rail.	
		Less than car- load lots.	Carload lots.
Agate granite.....	\$0.90 to \$0.90	\$1.60	\$1.10
Enameled ware.....	.90 to .90	1.60	1.10
Anvils.....	.80 to .70	1.15	.85
Asbestos belting.....	.90 to .70	1.50	1.00
Axes.....	.75 to .60	1.50	1.10
B. D. hangers and rails.....	.90 to .60	1.50	1.10
Bath tubs, iron.....	.70 to .60	1.60	.....
Bath tubs, steel.....	1.25 to 1.25	2.00	.....
Bellows.....	2.25 to 1.75	3.00	1.40
Belting, leather or rubber.....	1.20 to 1.20	3.00	.....
Blocks, tackle.....	.95 to .70	1.65	1.10
Blowers, blacksmiths'.....	.80 to .70	1.60	.....
Boilers, range.....	1.20 to 1.20	1.90	.....
Boilers, stands.....	1.25 to 1.00	2.00	1.35
Boils, nuts, and washers.....	1.25 to 1.00	2.00	1.35
Brass sheets.....	.70 to .55	1.20	.80
Brass tubes.....	.90 to .75	1.75	1.35
Brass rods.....	.90 to .75	1.85	1.35
Butts and hinges.....	.90 to .75	1.75	1.35
Cable chains.....	.65 to .55	1.15	.80
Casters and furniture.....	.75 to .55	1.35	.85
	.75 to .75	1.60	.....

Comparison of freight rates by water and by rail between San Diego, Cal., and New York and eastern points generally—Continued.

Articles.	By water (rate per 100 pounds).	By rail.	
		Less than car- load lots.	Carload lots.
Caldrons.....	\$1.00 to \$0.90	\$1.00	\$1.10
Chain traces.....	.85 to .85	1.00	.85
Clothes lines, jute.....	.85 to .60	1.25	.90
Clothes lines, wire.....	.90 to .60	1.00	
Clothespins.....	.80 to .60	1.50	1.00
Clothes racks.....	.80 to .70	2.00	
Clothes wringers.....	.85 to .75	1.75	1.25
Coal-oil cans, galvanized-iron.....	1.25 to 1.25	3.00	1.10
Coal scuttles, galvanized, nested.....	.90 to .92	1.60	1.10
Coffee mills.....	1.00 to 1.00	1.75	
Copper wire.....	.85 to .55	1.75	
Cordage.....	.85 to .65	1.25	.90
Crowbars.....	.65 to .65	1.25	
Cutlery, not plated.....	1.20 to 1.20	2.60	
Cutlery, plated.....	1.20 to 1.20	4.50	
Drills, blacksmiths.....	1.20 to 1.20	1.75	
Earthenware.....	1.25 to .95	2.00	1.40
Emery.....	.90 to .90	1.60	
Faucets, box valves.....	.90 to .75	1.75	
Feed cutters.....	1.10 to .85	3.00	
Feed cutters, knocked down.....		2.20	
Feed mills.....	1.10 to .85	1.25	1.40
Felloes.....	.75 to .55	1.40	.90
Files, iron and steel.....	.75 to .65	1.60	
Fittings, iron.....	.75 to .55	1.50	1.00
Forges.....	1.20 to 1.20	2.00	
Forges, iron.....	.80 to .70	1.50	1.00
Gas and oil stoves.....	1.35 to 1.10	3.00	1.45
Grates, iron.....	.90 to .75	2.20	1.45
Grindstones, unmounted.....	.70 to .60	1.50	1.00
Grindstone fixtures.....	.90 to .70	1.75	1.50
Hardware, n. o. s.....	.90 to .90	2.00	
Hinges.....	.80 to .70	1.60	
Hoppers.....	.90 to .80	2.00	1.40
Horseshoes, per keg.....	.70 to .60		
Horseshoes, per No. 11.....		1.25	.80
Hubs.....	.75 to .60	1.45	1.15
Ice-cream freezers.....	1.10 to .95	1.75	1.40
Iron bands and bars.....	.65 to .55	1.25	.75
Iron, corrugated.....	.80 to .60		.90
Iron, sheet.....	.80 to .60		.90
Iron valves.....	.70 to .55	1.50	1.00
Lanterns.....	.90 to .85	1.80	1.10
Lawn mowers.....	.90 to .80	1.75	1.25
Locks.....	.90 to .80	1.60	1.10
Mattocks.....	.70 to .65	1.75	1.25
Mauls.....	.70 to .60	1.15	.80
Meat choppers.....	1.00 to 1.00	1.75	
Nuts, iron.....	.70 to .55	1.20	.80
Oakum.....	.90 to .80	1.50	.90
Quers, brass, n. p.....	1.00 to .90	2.20	
Pails, iron, nested.....	.90 to .90	2.60	
Paper, sand.....	.85 to .70	1.60	1.10
Paper, building.....	.70 to .60	1.10	.75
Picks.....	.75 to .65	1.75	1.25
Pipe, iron.....	.65 to .55		
Pruning shears.....	.80 to .80	1.75	
Pumps.....	.85 to .75	1.75	
Radiators.....	.90 to .80	1.40	
Rasps.....	.75 to .65	1.00	
Rivets, copper.....	.75 to .65	1.75	
Rivets, iron.....	.75 to .55	1.20	.80
Rope.....	.85 to .60	1.25	.90
Saws.....	1.00 to .80	1.75	
Scales, platform.....	.80 to .65	1.60	
Screws, brass.....	.90 to .75	1.75	
Screws, iron.....	.70 to .50	1.20	.80
Scythes.....	.80 to .70	1.75	1.25
Scythe stones.....	.80 to .70	1.60	
Shovels.....	1.10 to .85	1.75	1.25
Sinks.....	1.10 to .75	1.75	1.25
Sledges.....	.70 to .60	1.15	.80
Spikes.....	.70 to .55	1.25	.80
Staples.....	.70 to .55	1.25	.80
Steel, bar and bundle.....	.65 to .55	1.25	.75
Tacks, brass and copper.....	.75 to .65	1.25	.75
Tacks, iron.....	.70 to .65	1.40	.90

Comparison of freight rates by water and by rail between San Diego, Cal., and New York and eastern points generally—Continued.

Articles.	By water (rate per 100 pounds.)	By rail.	
		Less than car- load lots.	Carload lots.
Tinware.....	\$1.25 to \$1.25	\$2.20	
Tinware, nested.....	.90 to .90	1.00	
Fire benders.....	.85 to .85	1.00	
Fire shrinker.....	.85 to .85	1.75	
Fire upsetter.....	.85 to .85	1.75	
Toe calks.....	.70 to .55	1.25	
Tubs, iron, nested.....	.90 to .90		\$1.40
Tuyères, iron.....	.75 to .65	1.75	
Valves, brass.....	.90 to .75	1.75	
Valves, iron.....	.70 to .55	1.50	1.00
Vises.....	.80 to .70	1.00	
Vises, blacksmiths.....		1.75	
Wagon jacks.....	1.00 to .75	1.60	
Wagon spring.....	.80 to .60	1.35	1.00
Wheelbarrows, knocked down, compact.....	1.00 to .85	1.35	1.00
Wheels, carriage or wagon, plain or tired.....	.90 to .75		1.15
Wire netting.....	.80 to .65	1.60	
Wrenches.....	.80 to .80	1.60	
Zincum.....	2.00		

SAN DIEGO, CAL., March 24, 1905.

EXHIBIT J 2.

Copy of list of questions submitted to the Chamber of Commerce of San Francisco, Cal., and "Report of special committee of the board of trustees of the Chamber of Commerce of San Francisco upon utility of Panama route for freight transportation between San Francisco and the Atlantic States, approved at a special meeting of the board of trustees, April 20, 1905," made in response to questions.

SAN FRANCISCO, CAL., March 21, 1905.

What kind of freight originates in San Francisco and the vicinity within its commercial radius for shipment to the eastern part of the United States and Europe?

Estimate the amount of each of the principal articles of such freight.

What part of this freight could be successfully transported by the way of Panama?

Are there any articles of such freight that it would not be practicable to ship by the way of Panama? If so, please name the articles and the reason why shipment by the Panama route would be impracticable.

What per cent of the freight that could be successfully shipped by the way of Panama is transported by that route? What part by the Straits of Magellan? What part by the transcontinental railroads? In answering the above questions, please state, if practicable, the per cent of each article that is shipped by the way of the various routes.

Please state in detail why any part of the freight that it is practicable to ship by the way of Panama is not shipped by that route.

What are the principal articles of freight shipped from San Francisco to points east of the Allegheny Mountains?

Estimate the amount of each article.

What are the freight rates charged by the railroads on each article?

What is the time consumed in transporting freight by rail from San Francisco to the large eastern cities—namely, Boston, New York, Philadelphia, and Baltimore?

What are the principal articles of freight that are shipped from San Francisco to the Mississippi Valley?

Estimate the amount of each of the principal articles of such freight.

What are the freight rates charged on each of the principal articles of such freight?

What is the average time consumed in shipping by rail to points in the Mississippi Valley?

Is any freight shipped from San Francisco to the Mississippi Valley by the way of Panama, or the Straits of Magellan? If so, please state the kind of freight, the amount, and the rates charged.

What are the principal articles of freight received at San Francisco from Europe, the eastern coast of the United States, and the Mississippi Valley?

Estimate the amount of each of the principal articles of such freight.

What per cent of this freight comes by the way of Panama, the Straits of Magellan, and the transcontinental railroads?

What are the freight rates charged on the principal articles by each of these routes?

What part of this freight that does not go by the way of Panama would it be practicable to ship by that route?

If a large part of the freight that could be shipped by the way of Panama is shipped by the other routes, please state the reasons why such shipment is made by other routes.

Is it essential to the commercial interests of San Francisco that there should be a line of steamers making regular schedule trips between Panama and San Francisco?

What American steamship companies doing business on the Pacific coast have vessels that would be equipped for handling efficiently cargo and passengers between the Pacific ports of the United States and Panama?

Is there any American steamship line that would establish a regular service between Panama and the Pacific coast of the United States if it were given the same privilege as to through bills of lading now held by the Pacific Mail Steamship Company with the Panama Railroad Company? If so, please state the lines.

If the privilege of through bills of lading were thrown open to all steamship lines doing business on the Pacific coast, and as a result of such open competition the Pacific Mail should not feel justified in maintaining its regular schedule service, would the result be beneficial or injurious to the commercial interests of San Francisco; that is, would an open service without schedule be preferable to the present status?

Under normal conditions, with rates fixed upon a basis of reasonable compensation for services rendered, would there be sufficient business between the Pacific and Atlantic ports of the United States to warrant the establishment of a first-class line of steamers to make regular schedule trips weekly from Pacific coast ports to Panama? Please answer this question in detail, giving the conditions under which, in your judgment, such line would or would not be successful.

Is there any freight originating elsewhere than at San Francisco and brought here by steamship companies that is transported to the eastern coast of the United States from San Francisco by rail? If so, please state the character of this freight, the amount, the place where it originates, and the rates charged by the railroad companies for its transportation across the continent.

Is any freight of this character, after it is shipped across the continent, reshipped from the eastern ports of the United States to Europe?

Is there now, or has there been in the recent past, any freight shipped to San Francisco from the eastern coast of the United States via Europe? If so, please state why shipments were made by that route.

In answering these inquiries it is desired that a full discussion of the subject-matter of each question be given, so that each answer will present a clear and comprehensive statement of all of the facts that have a direct or indirect bearing on the subject.

State any objections that the commercial interests of San Francisco may have against the present rate-making system of the Panama Railroad Company.

Please make any statement not covered by the above questions that you think may have a bearing on the subject of transportation by the way of Panama.

(Signed)

J. L. BRISTOW,

Special Panama Railroad Commissioner.

To the PRESIDENT OF THE CHAMBER OF COMMERCE.

Report of special committee of the board of trustees of the Chamber of Commerce of San Francisco upon utility of Panama route for freight transportation between San Francisco and the Atlantic States.

[Approved at a special meeting of the board of trustees April 20, 1905.]

SAN FRANCISCO, April 20, 1905.

To the honorable president and board of trustees of the Chamber of Commerce of San Francisco.

GENTLEMEN: Your committee, appointed to collect and furnish information to Hon. J. L. Bristow, special Panama Railroad commissioner, respectfully submits the following report:

The recent acquirement by the United States Government of the Panama Railroad and the steamship line connecting Colon with New York again opens the question as to the utility of the Panama route for the movement of freight between San Francisco and the Atlantic States.

The first overland rail line was the Central Pacific Railroad, opened in June, 1869, and for at least thirty years past this same question has been studied and discussed in every practical form and detail by the merchants of San Francisco, but at no time has there been a satisfactory solution or tangible result obtained.

During all these years, while San Francisco has been growing and its commerce steadily increasing in volume, the traffic between the Golden Gate and the Eastern States via Panama has remained almost stationary. True, there have been variations, due to occasional periods of extra activity in favor of competitive means of freight transportation, but each period of this character was of short duration, and the traffic quickly resumed its normal movement.

At this time, however, the subject comes up in an entirely different form. Under Government ownership of the Panama Railroad and the sea route to New York from Colon the only question to be considered would be whether freight rates could be made sufficiently low to make the saving on transportation expense an object to the shipper and enough to offset the additional time required in transit. While the Panama Railroad and the Atlantic Steamship Line were under private control the freight differentials between the competitive and noncompetitive periods were so unimportant that San Francisco merchants gave them little consideration. The situation was substantially the same to the shipper and importer during the time when Panama route rates were scheduled under agreement with transcontinental lines as when the Panama route was independent of all alliances and stipulations.

As an illustration of this fact, it will be recalled that in the summer of 1892 the management of the Panama Railroad Company announced its willingness and intention to cooperate with a Pacific coast line of steamships under the American flag and thus maintain an independent regular service of steamers between San Francisco and New York, touching at Mexican and Central American ports on the west coast, the line to be absolutely free from all entangling agreements with railroads or pooling contracts. This plan was duly formulated, and the enterprise was commended to the Governments of Mexico and the Central American republics as worthy of their aid and support and to the merchants of San Francisco and the State at large as a means of building up and increasing the trade relations between this city and the Atlantic States to our mutual benefit, and especially because it afforded to California a water outlet for our products to the markets of the Eastern States and as a means of ingress of importations from that section of our country, the traffic both ways being at reduced competitive freight rates.

With this objective in view, the merchants of San Francisco established and commenced to operate the North American Navigation Company, covering the route between San Francisco and Panama in connection with the Isthmus railroad and steamers on the Atlantic side from Colon. All the commercial bodies of this city were appealed to, and the merchants of both city and State were urged to use this route on all freight possible to come or go that way.

This effort was the best and most substantial ever put forth to utilize the Panama route for freight purposes, but, as will be remembered, it was of short duration and failed to accomplish the much-sought results.

There are reasons why the Panama route can not be utilized with advantage in the commercial interchange of commodities between San Francisco and the Atlantic States, and with the steady development of transportation facilities between nations, as well as between our own States, those reasons are becoming more potential every year. In brief, they are but two in number:

First. Loss of time in transit.

Second. Increased freight cost, made necessary by transshipment from steamer to car and from car to steamer.

These two factors are the obstacles. They are permanent for the time being and can not be overcome until the Panama Canal is completed. At present all freight shipped from San Francisco to New York via the Panama route has to be handled at least six times in transit, thereby increasing the risk of damage or breakage, while by overland railroad it is handled only two times and makes the journey in less than one-half the time consumed via Panama.

As heretofore stated, the freight movement from San Francisco to the Atlantic States via Panama changes but little from year to year. The list of commodities, while extensive, does not show the same ordinary increase as in other channels of trade. In order to give a good idea of the character and volume of this traffic, the following complete statements for the last three alternate fiscal years, showing the commodities and quantities thereof shipped from San Francisco to the Atlantic States by sea, are presented:

Arti
Asp
Agri
Bag
Bea
Biey
Boo
Boo
Brat
Barl
Bees
Bon
Bori
Cann
Cac
Chin
Colf
Coft
Cem
Cord
Cand
Codf
Drug
Drug
Dry
Elec
Fert
Fish
Fruit
Fruit
Fruit
Glass
Groc
Groc
Hard
Harm
Hone
Hops
Iron
Iron
Lard
Lead
Leath
Lum
Lum
Liqu
Mach
Met
Met
Millst
Millst
Misc
Misc
Marb
Nuts
Nails
Oil
Oil
Paint
Paper
Pipe
Quick
Rice
Rais
Rye
Salt
Salt
Salm
Seed
Sewi
Sugar
Salt
Ship
Tin
Toba
Tea
Veget
Wine
Wine
Wool
Whisk
Wheat
Wire
Varni

Articles.	1903-4.	1901-2.	1899-1900.
Arms and ammunition.....	packages.....	1	10
Asphaltum.....	do.....	9,174	10,256
Agricultural implements.....	do.....		16,308
Bags and bagging.....	do.....		50
Bacon.....	bales.....	116	333
Bicycles.....	pounds.....	251,504	1,032,273
Books and stationery.....	crates.....	1	221,714
Boots and shoes.....	packages.....	89	1
Brandy.....	do.....	10	54
Barley.....	gallons.....	2,918	853
Beeswax.....	centals.....		47,620
Bone meal.....	pounds.....		507,701
Borax.....	tons.....		10,717
Canned goods.....	pounds.....		24,165
Cascara bark.....	cases.....	4,848	1,000,378
China merchandise.....	sacks.....	406	3,327
Coffee.....	packages.....	140	586
Copper.....	pounds.....	1,275	5,834
Cement and plaster.....	do.....	3,815	
Cordage.....	do.....		252
Candles.....	coils.....		41
Codfish.....	boxes.....		145
Drugs.....	packages.....		35
Dry goods.....	do.....	274	17
Electric goods.....	pounds.....		507
Fertilizers.....	packages.....	67	18,771
Fish.....	do.....	53	85
Fruit.....	sacks.....		2
Fruit, canned.....	packages.....	2	23
Fruit, dried.....	boxes.....	38	219
Fruit, dried.....	cases.....	36,104	43,155
Glassware.....	pounds.....	221,542	28,462
Groceries and provisions.....	cases.....	4,248	245,784
Groceries and provisions.....	packages.....	5	17,141
Hardware.....	pounds.....	40,750	1
Harness.....	packages.....	2,630	104,471
Honey.....	do.....	539	1,157
Hops.....	do.....	24	339
Iron.....	cases.....	1,438	764
Iron, manufactured.....	pounds.....		3,759
Lard.....	tons.....	303	170,031
Lead.....	packages.....	313	102
Leather.....	pounds.....	12,000	219
Lumber, manufactured.....	pigs.....	71,164	1,481
Lumber.....	packages.....	1,068	767
Liquors.....	do.....	10,823	695
Machinery.....	feet.....		245,829
Metals.....	cases.....		132
Millstuffs.....	packages.....	114	53
Millstuffs.....	do.....	19,486	11
Miscellaneous.....	do.....	277	1
Miscellaneous.....	pounds.....		672,486
Marble.....	packages.....	22,888	62,746
Nuts.....	pounds.....	2,728,825	14,394
Nails.....	packages.....		1,950,640
Oil and kerosene.....	sacks.....	2	13
Oil and kerosene.....	kegs.....		1
Paint.....	cases.....	3,086	23
Paper.....	barrels.....	536	3,436
Pipe.....	cases.....	291	598
Quicksilver.....	rolls.....	55	121
Rice.....	pieces.....	194	5
Raisins.....	flasks.....	7,404	130
Rye.....	pounds.....	26,390	105
Salmon.....	boxes.....		31,010
Salmon.....	centals.....		8
Seed.....	cases.....	166,437	15,720
Sewing machines.....	barrels.....	4,038	113,042
Sugar.....	pounds.....	100	206,832
Salt.....	cases.....	2	1,170
Ship chandlery.....	pounds.....	144,455	244,367
Tin.....	barrels.....		1
Tobacco.....	packages.....		94,150
Tea.....	ingots.....	147	46
Vegetables.....	pounds.....		8
Wine.....	do.....		120
Wine.....	sacks.....	5	430
Wool.....	gallons.....	4,118,675	1,891
Whisky.....	cases.....	69	3,684,675
Wheat.....	pounds.....	2,348,376	256
Wire.....	gallons.....		3,830,293
Varnish.....	centals.....		222
	bundles.....		1,231
	cases.....		20
			89

These totals comprise the aggregate shipments by sea, but the portion which goes by Panama can not be segregated with any degree of accuracy. As nearly as can be estimated at this time it is probably about 60 per cent via Panama and 40 per cent via Straits of Magellan.

The aggregate value of annual exports from San Francisco by sea for New York, and also the yearly totals for Panama as a port of destination since 1884, are shown as follows:

Year.	To Atlan- tic States (value).	To Panama (value).	Year.	To Atlan- tic States (value).	To Panama (value).
1884.....	\$2,940,250	\$316,131	1895.....	\$3,004,398	\$125,330
1885.....	3,116,791	258,240	1896.....	3,080,251	151,273
1886.....	3,054,201	185,610	1897.....	3,543,795	135,068
1887.....	6,688,755	213,379	1898.....	3,173,320	142,880
1888.....	6,384,500	183,900	1899.....	3,885,548	112,632
1889.....	6,010,147	130,844	1900.....	2,866,969	104,507
1890.....	4,671,899	100,647	1901.....	3,947,502	149,840
1891.....	5,372,225	114,513	1902.....	4,937,628	134,066
1892.....	8,548,705	96,068	1903.....	5,368,252	161,070
1893.....	4,732,799	110,103	1904.....	4,658,224	185,145
1894.....	3,767,546	136,910			

It will be noted that during all these years the outgoing freight from San Francisco to the Atlantic States by sea has maintained a comparatively even status. The percentage shipped via Panama during the last ten years is smaller than in the previous ten years, but for the entire period 60 per cent is a conservative allowance to be credited to the Panama route.

The tonnage movement between San Francisco and Panama for a series of years past has been as follows:

Year.	Arrivals.		Clearances.		Year.	Arrivals.		Clearances.	
	Vessels.	Tonnage.	Vessels.	Tonnage.		Vessels.	Tonnage.	Vessels.	Tonnage.
1884.....	25	42,859	25	42,860	1895.....	43	105,268	55	92,442
1885.....	29	47,864	27	43,528	1896.....	46	82,470	43	77,638
1886.....	43	69,729	42	68,810	1897.....	43	74,880	38	69,512
1887.....	44	70,747	43	68,090	1898.....	39	65,229	36	62,268
1888.....	37	65,410	36	65,204	1899.....	43	76,158	39	69,028
1889.....	31	53,000	33	57,930	1900.....	42	80,274	37	73,890
1890.....	38	67,145	36	63,874	1901.....	58	102,972	56	99,454
1891.....	41	70,713	37	66,542	1902.....	48	86,930	49	88,198
1892.....	47	77,356	48	79,607	1903.....	48	115,582	34	73,630
1893.....	54	90,012	63	107,337	1904.....	53	101,399	52	98,571
1894.....	52	89,521	53	91,539					

The bulk of these annual totals represents the traffic between San Francisco and the Atlantic States via Panama. Only a small portion was for Panama as a port of destination, and a still smaller portion was destined for Europe.

The tonnage movement between San Francisco and the Atlantic ports via the Straits of Magellan for a series of years past is shown as follows:

Year.	Arrivals.		Clearances.		Year.	Arrivals.		Clearances.	
	Vessels.	Tonnage.	Vessels.	Tonnage.		Vessels.	Tonnage.	Vessels.	Tonnage.
1884.....	54	87,771	9	13,052	1895.....	24	45,508	6	12,818
1885.....	40	66,702	10	13,979	1896.....	28	57,698	10	18,743
1886.....	33	59,808	9	11,657	1897.....	46	92,260	12	19,851
1887.....	41	64,956	13	22,068	1898.....	51	64,620	7	14,779
1888.....	40	62,318	10	12,947	1899.....	22	44,665	4	7,402
1889.....	45	79,771	12	19,905	1900.....	22	49,910	2	4,758
1890.....	49	84,260	16	25,882	1901.....	15	40,053	10	26,914
1891.....	54	88,412	24	39,890	1902.....	21	71,434	8	23,822
1892.....	60	111,590	33	57,840	1903.....	24	77,918	8	11,918
1893.....	38	70,554	29	55,514	1904.....	24	101,043	11	35,326
1894.....	32	50,180	10	19,082					

The volume of the freight movement between San Francisco and the Atlantic States by rail is not obtainable for recent years, but in order to show the rapid growth of overland traffic as compared with the stationary condition of the movement via Panama to the East-

ern States, the following figures showing the freight movement over the Central Pacific and Southern Pacific lines for a series of years prior to 1895 from all centers of freight accumulation in California are submitted:

Year.	Eastbound.	Westbound.	Year.	Eastbound.	Westbound.
	<i>Pounds.</i>	<i>Pounds.</i>		<i>Pounds.</i>	<i>Pounds.</i>
1884.....	308,141,950	413,905,730	1890.....	1,320,926,130	950,174,300
1885.....	382,871,840	373,970,110	1891.....	805,423,000	671,406,000
1886.....	533,213,840	569,535,580	1892.....	945,732,000	850,646,000
1887.....	600,741,890	707,378,590	1893.....	1,179,546,000	888,676,000
1888.....	561,406,950	720,664,660	1894.....	1,320,926,130	950,174,300
1889.....	551,490,800	714,423,380			

As far as can be learned from the merchants of San Francisco there are few commodities which can be shipped from this city to the Atlantic States to better advantage via the Panama route than by transcontinental lines. The rates via Panama seem to be so adjusted that the small saving in freight charges is not sufficient to warrant the risk of damage or breakage in the several handlings required during transportation. Personal expressions of opinion upon this subject have been obtained from a number of the leading importing and exporting firms of San Francisco. These statements are based on actual experience in a number of representative lines of business, which are sufficiently varied to be considered as a guide, and equally applicable to many other branches of trade not specifically mentioned. Details are as follows:

Paints, oils, and glass.—No freight in these lines, originating in San Francisco, is shipped to Eastern States or Europe. All these commodities are imported here in large quantities. Only a small portion, say 5 per cent, comes from the Atlantic States via Panama. The balance comes from the Atlantic coast by rail, and that from Europe comes via Straits of Magellan. That portion originating in the Mississippi Valley comes by rail. Routes named are preferred to Panama because there is less probability of damage by breakage or leakage, and this more than offsets the question of time.

Freight rates, carload lots, by rail, on plate glass, \$1.50 per 100 pounds; window glass, 90 cents, and paints, 90 cents per 100 pounds. Panama rates, paints and varnishes, 72 cents per 100 pounds; lubricating oils, 50 cents per 100 pounds. By Straits of Magellan the rate is \$10 to \$15 per ton.

Canned salmon.—Only a small part of the 60,000 to 70,000 tons exported annually goes by Panama. About one-third is shipped by sailing vessels via Straits of Magellan to Europe, and the other two-thirds is shipped by rail to other parts of the United States. Shipments are occasionally made to New York via Straits of Magellan. Present rail rates to the Atlantic coast are 75 cents per 100 pounds in carload lots.

Quicksilver.—Some small quantities are shipped to New York via Panama, probably an average of 3,000 flasks per year for the last few years. Shippers claim that where time is a factor the benefit of lower freight rate is infinitesimal. The bulk of shipments go by rail. As opportunity occurs, shipments are made via Straits of Magellan at rates lower than via the Isthmus.

Dried fruits.—Climatic conditions are a barrier to shipments of some varieties of fruit via Panama, but aside from that fact the present small differences in freight rates between the overland railroad and Panama Railroad would not justify the use of the latter route. The climate is a serious objection which can not be overcome, and occasionally small shipments of fruit, apparently well packed in paper-lined boxes, have arrived at destinations in a partially damaged state.

Canned fruits and vegetables.—These commodities are largely shipped by rail to Atlantic States and Europe via Straits of Magellan. Panama rates would have to be considerably reduced in order to compete for the traffic. Packers can furnish but little information beyond saying that the canneries are nearly all in the interior and distant from San Francisco, thus causing a local charge for freight and cartage where goods are placed on board a steamer bound for Panama. The further fact is also cited that goods going in this way are subjected to several handlings on account of lightering at Panama and movement to and from cars, thus causing more or less damage, and the freight rates being so near the overland rail figure make it advisable for canners to ignore the Panama route.

Salt salmon and codfish.—This stock could not be shipped via Panama because of unfavorable effect of the climatic conditions. If the fish were packed in sealed and lined boxes it would probably safeguard the goods, but the bulk of the stock is not so packed, and it is moved overland in carload lots in twelve to sixteen days' time at rates only a trifle above the rate via Panama, which would require twenty-three to thirty days' time.

Wines and brandies.—Not more than one-half of the wines and brandies shipped from San Francisco to the Atlantic States is forwarded by sea, and only about one-fourth of that

goes by Panama. If there were regular steamers plying between Colon and New Orleans, fully one-third of all the wine and brandy forwarded could go via Panama. With the present limited steamer service on the Atlantic side, about all the wine practicable to ship via Panama is now going that way. Wine is now shipped by rail to the Mississippi Valley points at 75 cents per 100 pounds and to the Atlantic coast for 85 cents per 100 pounds. The only reason that freight is shipped by other routes than Panama is that the greater convenience of shipping points and handling makes it more economical to ship by rail than sea.

Hops.—Large quantities are exported from California, but the bulk of shipments is by railroad, which charges a rate of \$2 per 100 pounds to all main Missouri River and Mississippi River points, and a through rate of \$2.60 per 100 pounds via rail to the Atlantic seaboard points and thence by steamer to London. Hops would not stand shipment via Panama, because of the climate, unless in sealed boxes, while they are shipped by the transcontinental lines in bales and are free from all the extra handling that would be necessary via Panama.

Boots and shoes.—In this line shipments to the east are small, but the quantities of raw material coming west are large, and considerable quantities of manufactured goods are also received here. Fully 98 per cent of all such freight comes to San Francisco by rail, the freight rate being \$2.50 per 100 pounds. At least 90 per cent of all this freight could come by the Panama route if there was a regular schedule of sailings and a rate of \$1.50 per 100 pounds or less was established. The present small difference in rates by rail and via Panama does not warrant the use of the Isthmus route.

Paper, cardboard, twines, etc.—There are no shipments worth mentioning in this line of business from San Francisco eastward, but considerable quantities come from the Atlantic States to San Francisco. Of these shipments less than one-quarter come by way of the Panama route, the percentage division being 60 per cent by transcontinental railroad, 24 per cent via Panama and 7 per cent via Straits of Magellan. Rates by rail are 75 cents to \$1.20 per 100 pounds by Panama; 60, 72, and 96 cents per 100 pounds, depending on the goods, and by Straits of Magellan, 50 to 65 cents per 100 pounds. Only goods in cases can go by Panama, bundle and crate goods being unable to stand the handling. All bundle goods that can come or go overland in a box car without transfer for 75 cents per 100 pounds, as compared with present rates via Panama, will move that way in preference to either Panama or Straits of Magellan route.

Redwood lumber and shingles.—There are about 2,500 carloads of redwood lumber and about 1,800 carloads of shingles shipped annually from California to the Atlantic States. The shipments from Humboldt Bay by sea to the Atlantic States and Europe aggregate about 4,000,000 feet yearly. Less than 10 per cent of the exports by sea goes via Panama for the reason that the frequent rehandling damages high-grade lumber. The shipments via Panama are so small that it is safe to say practically all the shipments for the Eastern States go by transcontinental railroad. The rail rates from Atlantic ports to points in the Eastern States, where redwood lumber is most largely used, are too high to permit shipment via Panama. By rail the rate is 60 cents per 100 pounds to Chicago, Kansas City, Omaha, and kindred points, while to New York, Boston, Philadelphia, and common points the rate is 67 cents per 100 pounds. Time required, twenty to thirty days.

Hardwood lumber and wagon materials.—In this line of business the traffic is almost entirely from east to west. All shipments come by rail because of the liability to breakage when shipped via Panama, and the present difference in freight charges is not commensurate with the risk; besides, by rail it takes thirty-five days less time. Much of this hardwood lumber comes from the Mississippi Valley—say about 4,000 tons—and nearly the same quantity from far-eastern points. From the Atlantic States probably 20 per cent of the rough material comes via Panama and about as much more via Straits of Magellan. The balance comes by rail.

Iron and steel.—Large quantities are shipped annually from the Atlantic and Gulf States westward to California. Only small quantities come via the Panama route—certainly not over 20 per cent, all told. The rest comes by rail, excepting occasional shipments via Straits of Magellan. The present freight rate on iron and steel from New York via Panama is 45 cents per 100 pounds. Same articles by rail pay 75 cents per 100 pounds. Hardware, horseshoes, and similar class ironware come via Panama for 20 per cent less than the overland railroad rate, but when the extra time and possibility of damage are considered the difference is scarcely an object to the importer.

Agricultural tools and implements.—There is practically no movement of these commodities to the Atlantic States from California, but San Francisco ships liberal quantities to Spain, the Argentine Republic, and occasionally to southern Russia. All these shipments are successfully forwarded via the Panama route. To Spain the shipments have embraced traction engines, plows, combined harvesters, and many varieties of agricultural implements. For the past year or more the Argentine Republic has been mostly supplied from New York because of the lack of direct lines from San Francisco or Colon.

A careful consideration of all the data obtainable brings the subject down to the point of determining what is the most practical and at the same time beneficial course that will promote the commercial interests of San Francisco and the Pacific coast in the years to come.

with reference to freight traffic via the Isthmus of Panama. For many years the Pacific Mail Steamship Company has maintained a regular steam service between this port and Panama under an exclusive agreement with the Panama Railroad Company. The United States Government has acquired ownership of the Panama Railroad Company's line and also the steamship line plying between Colon and New York, and notice has been served on the Pacific Mail Company that its contract with the Panama Railroad Company will be canceled on July 12, 1908.

Various opinions have been advanced as to what should be done for the future, but there is really but one object to be attained, and that is the adoption of such course as will make the Panama route more advantageous for the movement of freight than under the conditions heretofore existing.

In reaching a satisfactory conclusion there are certain elements of fact which must be borne in mind:

First. The present freight schedule via Panama is apparently based on the overland railroad freight schedule, the charges of the former varying from 78 to 90 per cent, with an average of about 83 per cent of the latter; in other words, the differentials in favor of the Panama route, with its thirty-day trip, as compared with the transcontinental route, with its fourteen-day trip, are so small that the shipper either east or west does not consider the saving sufficient to cover risk of damage or breakage in the necessary several handlings of the goods via Panama.

Second. A regular schedule of sailing dates would seem to be a necessity. This would enable shippers to order definite quantities per steamer without straining their storage facilities at New York or other eastern centers. If an open service were established, giving as satisfactory sailing dates as has the Pacific Mail Company's service and doing the business on a lower basis of freight rates, it would prove a very desirable arrangement, and the traffic via Panama would be greatly enlarged.

Third. The ability to transport freight via Panama does not rest with the steamers alone. Numerous steamships with large carrying capacity can be readily obtained, but the quantity of tonnage will be measured by the ability of the Panama Railroad to handle it. That company has already a very large business to handle with South America, west coast of Central America, Mexico, and California, and its facilities should be enlarged to meet the increasing traffic over this road. There have been frequent instances in recent years when there has been a great freight congestion on the Isthmus. Now, there is a new question of importance, the building of the Panama Canal. This work will require at least ten years, and with the enormous quantities of machinery, supplies for labor, and material of construction, will not the Government business be so voluminous that, with present facilities, the ability of the railroad to handle this tonnage and the through freight be largely diminished. Should the present line be double tracked it would still be a question as to whether the additional facilities would admit of much increase in general freights, aside from the requirements occasioned by canal construction.

Fourth. It is generally conceded that a line of steamers plying between San Francisco and Panama is a commercial necessity. In this connection merchants favor a service with a regular schedule to one without schedule. Such schedule is warranted by trade requirements, and should be maintained by one or more companies, with a fixed tariff based upon a fair revenue, which would provide more equitable rates on freight. Regular established rates would doubtless better serve the commercial interests of San Francisco than open competition in rates, which might fluctuate to a degree that would be disastrous.

Fifth. If it can be accomplished without violation of treaty obligations, none of the Mexican and Central American tonnage now carried by American vessels should be allowed to go to foreign vessels, as it would leave the American line with only New York and San Francisco through business to live on. Receipts from way freights increase the earnings of the company and help to reduce the cost of New York and California business. If the way traffic were surrendered to foreign lines it would increase the cost of the United States interstate business and impair a service which fifty years of active operation has demonstrated should be improved.

Sixth. The canal is now being built by American enterprise, and American steamships should control the traffic of the Isthmus until the day America opens the portals of the Panama Canal to our country's new merchant marine and the commerce of the world.

We are strongly opposed to Government ownership or operation of steamship lines for commercial purposes, and we recommend the National Government adopting such measures as will foster the establishment and maintenance of regular lines of American steamships operated by private American enterprise.

Respectfully submitted.

WM. R. WHEELER,
W. J. DUTTON,
RUFUS P. JENNINGS,
Committee.

EXHIBIT J 3.

Copy of list of questions submitted to the Chamber of Commerce of Los Angeles, Cal., and answers thereto.

LOS ANGELES, CAL., March 15, 1905.

What kind of freight originates in the vicinity of Los Angeles for shipment to the eastern part of the United States and Europe?

What part of this freight could be successfully transported by the way of Panama?

Estimate the amount of each article.

What is the freight rate now charged by the railroads for each article of this freight to Boston, New York, Philadelphia, Baltimore, and New Orleans?

What are the harbor facilities at San Pedro?

How many wharves, and who own or control them?

What steamship lines make this port, and how often do their vessels call?

What are the principal articles of freight shipped to Los Angeles from points east of the Allegheny Mountains?

Estimate the amount of each article.

What are the freight rates charged by the railroads on each article?

What is the time consumed in transporting freight by rail from Los Angeles to New York?

What are the principal articles of freight that are shipped from the Mississippi Valley to Los Angeles?

Estimate the amount of each article.

What are the freight rates charged on each article?

What articles of merchandise are shipped from Los Angeles to Europe and the eastern coast of the United States by the way of the Straits of Magellan?

What steamship lines handle this business, and what are the rates charged?

What are the principal articles of merchandise received at Los Angeles from Europe and the eastern part of the United States by the way of the Straits of Magellan?

What are the rates charged for such freight?

Would it be practicable to ship such articles of freight by the way of Panama? If not, why not?

Please make any statement not covered by the above questions that you think may have a bearing on the question of transportation by the way of Panama.

(Signed)

J. L. BRISTOW,

Special Panama Railroad Commissioner.

To the PRESIDENT OF THE CHAMBER OF COMMERCE.

Report to Hon. J. L. Bristow, War Department, Special Panama Railroad Commissioner, Washington.

Question. What kind of freight originates in the vicinity of Los Angeles for shipment to the eastern part of the United States and Europe?

Answer. Citrus fruits, vegetables, dried fruit and raisins, nuts, wines and brandy, wool, honey, olives and olive oil, beans, hides, asphaltum, canned goods.

Question. What part of this freight could be successfully transported by way of Panama?

Answer. Nuts, wines and brandies, wool, olives and olive oil, beans, hides, citrus fruits.

Question. Estimate the amount of each article.

Answer.

Citrus fruits.....	carloads..	10,000
Vegetables.....	do.....	1,000
Dried fruit and raisins.....	do.....	300
Nuts.....	do.....	500
Wines and brandies.....	gallons	1,000,000
Wool.....	pounds..	800,000
Honey.....	carloads..	50
Olives and olive oil.....	do.....	5
Beans.....	do.....	500
Hides.....	pounds..	2,000,000
Asphaltum.....	tons..	15,000
Canned goods.....	carloads..	500

Question. What is the freight rate now charged by the railroads for each article of this freight to Boston, New York, Philadelphia, Baltimore, and New Orleans.

Answer.

[Per 100 pounds, carload lots.]

Articles.	New York and Boston and common points.	Mississippi River common points.
Citrus fruit (per 100 anywhere east of Rockies).....	\$1.25	\$0.90
Vegetables.....		
Dried fruit.....	\$1.00 to 1.20	\$1.00 to 1.20
Nuts.....	1.30	1.30
Wine and brandy, glass.....	1.00	1.00
Wine and brandy, barrels.....	.57	.75
Olives and olive oil.....	1.00 to 1.50	1.00 to 1.50
Beans.....	.75	.75
Wool.....	1.00 to 1.50	1.00 to 1.50
Hides.....	.90 to 1.20	.90 to 1.20
Honey.....	.85	.85
Asphaltum.....	.50	.50
Canned goods.....		

Question. What are the harbor facilities at San Pedro?

Answer. The harbor facilities at present are comparatively few, but the plans of the War Department, which are being carried out, contemplate facilities that will be second, probably, to none on the coast. At present the depth of water over the bar at the entrance to the harbor at low tide is 19 feet, which is to be increased, and the depth at the wharves at present is 23 feet, to be increased to 25 feet, except in the turning basin, which, if carried out as contemplated, will probably be 30 feet.

Question. How many wharves, and who own or control them?

Answer. It is estimated that the total wharfage of the harbor, when completed, will be between 7 and 8 miles. At present there are nine wharves doing commercial business, owned or controlled as follows:

Southern Pacific Railroad Company.
San Pedro, Los Angeles and Salt Lake Railroad Company.
Banning Brothers.
Southern California Lumber Company.
Kerckhoff-Cuzner Lumber Company.
San Pedro Lumber Company.
Crescent Wharf and Warehouse Company.
Southwestern Lumber Company.
California Fish Company.

Question. What steamship lines make this port, and how often do their vessels call?

Answer. The only steamship lines coming into this port regularly are the Pacific Coast Steamship Company, the North Pacific Coast Steamship Company, and the Merchants' Independent Line, arriving and departing about twice a week. The balance of the business is practically all lumber vessels and tramps. The American-Hawaiian Line, via Straits of Magellan, makes this port about once a month.

Question. What are the principal articles of freight shipped to Los Angeles from points east of the Allegheny Mountains?

Answer. Iron and steel, hardware, groceries, and provisions, paints, oils, and glass, drugs and sundries, dry goods, paper, cardboard, and twine.

Question. Estimate the cost of each article.

Answer.

Iron and steel and hardware.....	tons per year..	150,000
Groceries and provisions.....	carloads from Mississippi Valley..	9,000
Do.....	carloads from Atlantic States..	1,000
Do.....	carloads from Europe..	100
Paints, oil, and glass.....	tons..	3,000
Drugs and sundries.....	tons per month..	500
Dry goods, etc.....	tons per annum..	18,000
Paper, cardboard, and twine.....		

Question. What are the freight rates charged by the railroads on each article?

Answer. Dry goods, \$1 to \$2.60 per 100 pounds. For balance, see tariff.

Question. What is the time consumed in transporting freight by rail from Los Angeles to New York?

Answer. From twenty to thirty days, or more, except in the case of fruit, which goes through on a quicker schedule—a week or ten days or more usually.

Question. What are the principal articles of freight that are shipped from the Mississippi Valley to Los Angeles?

Answer. Groceries and provisions, glassware, iron and steel, hardware, and various manufactured products.

Question. Estimate the amount of each article.

Answer. Groceries and provisions, 9,000 carloads; glassware, iron, steel, and hardware, small proportion of the total.

In many lines it is the practice to discriminate against this territory, owing to the more favorable freight rates offered by eastern territory on account of water competition there.

Question. What articles of merchandise are shipped from Los Angeles to Europe and the eastern coast of the United States by the way of the Straits of Magellan?

Answer. Very little, if any, traffic this way.

Question. What are the principal articles of merchandise received at Los Angeles from Europe and the eastern part of the United States by the way of the Straits of Magellan?

Answer. From Europe come occasional cargoes in sailing vessels of cement, coke, pig iron, steel rails, and miscellaneous merchandise. From the eastern coast comes a considerable quantity of iron and steel, hardware, some groceries and canned goods, paints and oils, an occasional cargo of coal.

Question. What are the rates charged for such freight?

Answer. The cargoes in sailing vessels from Europe are figured on a basis that is so variable that it would hardly be of any service to you in this matter. At least so it seems to me in talking with the agents of these lines. The tariff is fixed largely according to the state of the market and by the relative supply and demand of vessels or shipments.

From the eastern coast of the United States the rate is fixed at about 30 per cent less than the all-rail shipment across the continent. This, however, is pretty nearly made up by the additional expense on account of marine shipments, interest on the money invested in the shipment, and the time consumed in making the trip.

Question. Would it not be practicable to ship such articles of freight by the way of Panama? If not, why not?

Answer. In our investigation as to the utility of the Panama route as a means of exchange of commodities between this vicinity and the eastern coast, we find at the present time the following conditions unfavorable to traffic:

(1) Loss of time in transit. At the present time all-rail shipments come through in from two to four weeks, whereas by Panama it requires from forty to sixty days. This long time is due in part to the fact that under present conditions freight for this point is carried via San Francisco, no vessels stopping between that city and Panama in the United States.

(2) Extra handling necessitated by transshipment from car to steamer and from steamer to car, both at San Francisco and at each side of the Isthmus, increasing the chance of damage or leakage. For this reason many articles of merchandise can not be shipped by this route. We find considerable complaint from shippers who have used the Panama route as to the difficulties and delays experienced in collecting damages or claims for loss to goods in transit, it being a much more difficult matter to get a settlement with the various transportation companies handling the traffic than with the transcontinental railroads.

(3) Lack of steamer service between our southern California ports and Panama, as noted in above paragraph. At the present time there is a very small amount of traffic via Panama compared to the possibilities under more favorable circumstances. Freight by this route now has to be shipped to and from San Francisco, thereby adding several days to the time in transit and necessitating considerable extra handling, especially, as is often the case, the goods are taken to and from San Francisco by steamer. As to the local charges to and from San Francisco, we find this is in part or wholly absorbed, not adding much to the tariff rates.

It is estimated that the tariff by the way of Panama averages about one-third lower than the all-rail rates, but to offset this is the marine insurance, which has to be added, the extra time to be allowed, and an added risk of damage and leakage.

The amount of traffic between this market and the eastern part of the United States could undoubtedly be materially increased by a line of steamers plying between Panama and points on this coast, making San Pedro a regular port, having regular sailing dates, and operating in conjunction with the Panama Railroad and a similar line of steamers plying between Panama and New York, with a tariff giving, if possible, a slightly more favorable differential in favor of the Panama route than at present, to offset the various drawbacks of this route.

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EXHIBIT J 4.

Copy of list of questions submitted to the chamber of commerce of Portland, Oreg., and answers thereto.

PORTLAND, OREG., March 28, 1905.

What kind of freight originates in Portland and the vicinity within its commercial radius for shipment to the eastern part of the United States and Europe?

Estimate the amount of each of the principal articles of such freight.

What part of this freight could be successfully transported by the way of Panama?

Are there any articles of such freight that it would not be practicable to ship by the way of Panama? If so, please name the articles and the reason why shipment by the Panama route would be impracticable.

What per cent of the freight that could be successfully shipped by the way of Panama is transported by that route; what part by the Straits of Magellan; what part by the transcontinental railroads? In answering the above questions please state, if practicable, the per cent of each article that is shipped by the way of the various routes.

Please state in detail why any part of the freight that it is practicable to ship by the way of Panama is not shipped by that route.

What are the principal articles of freight shipped from Portland to points east of the Allegheny Mountains?

Estimate the amount of each article.

What are the freight rates charged by the railroads on each article?

What is the time consumed in transporting freight by rail from Portland to the large eastern cities—namely, Boston, New York, Philadelphia, and Baltimore?

What are the principal articles of freight that are shipped from Portland to the Mississippi Valley?

Estimate the amount of each of the principal articles of such freight.

What are the freight rates charged on each of the principal articles of such freight?

What is the average time consumed in shipping by rail to points in the Mississippi Valley?

Is any freight shipped from Portland to the Mississippi Valley by the way of Panama or the Straits of Magellan? If so, please state the kind of freight, the amount, and the rates charged.

What are the principal articles of freight received at Portland from Europe, the eastern coast of the United States, and the Mississippi Valley?

Estimate the amount of each of the principal articles of such freight.

What per cent of this freight comes by the way of Panama, the Straits of Magellan, and the transcontinental railroads?

What are the freight rates charged on the principal articles by each of these routes?

What part of this freight that does not come by the way of Panama would it be practicable to ship by that route?

If a large part of the freight that could be shipped by the way of Panama is shipped by the other routes, please state the reasons why such shipment is made by other routes.

Is it essential to the commercial interests of Portland that there should be a line of steamers making regular schedule trips between Panama and Portland?

What American steamship companies doing business on the Pacific coast have vessels that would be equipped for handling efficiently cargo and passengers between the Pacific ports of the United States and Panama?

Is there any American steamship line that would establish a regular service between Panama and the Pacific coast of the United States if it were given the same privilege as to through bills of lading now held by the Pacific Mail Steamship Company with the Panama Railroad Company? If so, please state the lines.

Under normal conditions, with rates fixed upon a basis of reasonable compensation for services rendered, would there be sufficient business between the Pacific and Atlantic ports of the United States to warrant the establishment of a first-class line of steamers to make regular schedule weekly trips from Pacific coast ports to Panama? Please answer this question in detail, giving the conditions under which, in your judgment, such line would or would not be successful.

Is there any freight originating elsewhere than at Portland and brought here by steamship companies that is transported to the eastern coast of the United States from Portland by rail? If so, please state the character of this freight, the amount, the place where it originates, and the rates charged by the railroad companies for its transportation across the continent.

Is any freight of this character, after it is shipped across the continent, reshipped from the eastern ports of the United States to Europe?

Is there now, or has there been in the recent past, any freight shipped to Portland from the eastern coast of the United States via Europe? If so, please state why such shipments were made by that route.

In answering these inquiries it is desired that a full discussion of the subject-matter of each question be given, so that each answer will present a clear and comprehensive statement of all of the facts that have a direct or indirect bearing on the subject.

State any objections that the commercial interests of Portland may have against the present rate-making system of the Panama Railroad Company.

Please make any statement not covered by the above questions that you think may have a bearing on the subject of transportation by the way of Panama.

(Signed)

J. L. BRISTOW,
Special Panama Railroad Commissioner.

To the PRESIDENT OF THE CHAMBER OF COMMERCE.

THE PORTLAND CHAMBER OF COMMERCE,
Portland, Oreg., April 27, 1905.

Hon. J. L. BRISTOW,
Special Panama Railroad Commissioner,
War Department, Washington, D. C.

MY DEAR SIR: Again replying to your favor of the 15th instant, in which you ask that the answers to questions submitted by you on your recent visit to this city be forwarded as early as possible, I have to say that I have pleasure in sending you to-day as full a report on all the matters submitted by you as it has been possible for us to obtain in the short time allowed.

Hoping this will reach you in time for the compilation of your report, I have the honor to be,

Yours, very respectfully,

WM. D. WHEELWRIGHT,
President.

P. S.—You will not overlook the fact that all the business done for a series of years by way of the Isthmus has been done under a great disadvantage. The railroad company, having control of the Pacific Mail Steamship Company, has influenced the fixing of rates with a view to discouraging business, and what has been done under such circumstances is of course no criterion of what will be done if reasonable rates are made.

PORTLAND, Oreg., April 26, 1905.

Question. What kind of freight originates in Portland and the vicinity within its commercial radius for shipment to the eastern part of the United States and Europe?

Answer. Lumber, wool, grain, hops, salmon, fruit (green and dried), canned fruits.

Question. Estimate the amount of each of the principal articles of such freight.

Answer. The shipments of lumber in 1904 to points in the eastern part of the United States from Washington and Oregon were 4,892 carloads, and shingles 5,136 carloads. As these shipments emanate from Portland, Grays Harbor, and Puget Sound points and interior mills it is impossible to segregate them.

Grain.—No regular movement. On account of abnormal prices, a large part of the 1904 crop moved east, but usually goes to the Orient and Europe by water, so it necessarily could not be estimated.

Hops.—5,550 tons.

Salmon.—13,800 tons.

Wool.—10,000 tons. The wool crop comes from the eastern part of the State, and is not directly tributary to Portland, but with proper rates would seek this port to be shipped by Panama.

Fruit (green).—500 cars.

Prunes.—4,500 tons.

Canned goods.—700 to 1,000 tons.

Question. What part of this freight could be successfully transported by the way of Panama?

Answer. All, except fresh fruits.

Question. Are there any articles of such freight that it would not be practicable to ship by the way of Panama? If so, please name the articles and the reason why shipment by the Panama route would be impracticable.

Answer. Fresh fruits will not stand transportation, on account of climate in the Tropics and the time employed in shipment.

Question. What per cent of the freight that could be successfully shipped by the way of Panama is transported by that route; what part by the Straits of Magellan; what part by the transcontinental railroads? In answering the above questions please state, if practicable, the per cent of each article that is shipped by the way of the various routes.

Answer. Practically all of the above is now shipped by the transcontinental railroads.

Question. Please state in detail why any part of the freight that it is practicable to ship by the way of Panama is not shipped by that route.

Answer. There is no ship coming here from Panama, and goods would have to be shipped from Portland to San Francisco and reshipped from there, the cost in delay of which overcomes advantages offered in the way of lower freights. Were a regular steamship line instituted from Panama to Seattle and return, that would make regular calls at this port, and were the rates offered such as were enforced, say in the nineties, and the railroads should not reduce their rates, most of these products would go by the Isthmus. If the railroads should reduce their rates to the same proportionate differences that now exists, the shipments by the Isthmus would not be as heavy.

Question. What are the principal articles of freight shipped from Portland to points east of the Allegheny Mountains?

Answer. Dried fruit, salmon, hops, canned fruits, and vegetables.

Question. Estimate the amount of each article.

Answer. See page 1, paragraph 2.

Question. What are the freight rates charged by the railroads on each article?

Answer:

Dried fruits.—Boxes, carloads, \$1; less than carloads, \$2.20; sacks, carloads, \$1.20; less than carloads, \$2.20.

Salmon.—Carloads, 75 cents; less than carloads, \$1.90.

Hops.—Less than carloads, \$2; carloads, \$2.

Canned fruits and vegetables.—Carloads, 75 cents; less than carloads, \$1.90.

Question. What is the time consumed in transporting freight by rail from Portland to the large eastern cities, namely, Boston, New York, Philadelphia, and Baltimore?

Answer. Two to three weeks.

Question. What are the principal articles of freight that are shipped from Portland to the Mississippi Valley?

Answer. Dried fruits, hops, salmon, lumber, and shingles, fresh fruits, canned fruits, 1904 crop wheat.

Question. Estimate the amount of each of the principal articles of such freight.

Answer. Prunes, 4,500 tons; hops, 1,350 tons; salmon, 2,600 tons; lumber, 10,000 cars; shingles, 14,000 cars. As these shipments emanate from Portland, Grays Harbor, and Puget Sound points, and interior mills it is impossible to segregate them. Fresh fruits, 3,500 tons; canned fruits, 600 tons.

Question. What are the freight rates charged on each of the principal articles of such freight?

Answer. Dried fruits, boxes, carloads, \$1; less than carloads, \$2.20; sacks, carloads, \$1.20; less than carloads, \$2.20; hops, carloads, and less than carloads, \$2; salmon, carloads, 75 cents; less than carloads, \$1.90.

Lumber is not shipped in less than carload lots. The rate to St. Louis and common points is 52½ cents; to Texas and common points (Houston and Galveston), 72½ cents.

Canned fruits and vegetables, carloads, 75 cents; less than carloads, \$1.65 (average).

Question. What is the average time consumed in shipping by rail to points in the Mississippi Valley?

Answer. Two weeks.

Question. Is any freight shipped from Portland to the Mississippi Valley by the way of Panama or the Straits of Magellan? If so, please state the kind of freight, the amount, and the rate charged.

Answer. None at present.

Question. What are the principal articles of freight received at Portland from Europe, the eastern coast of the United States, and the Mississippi Valley?

Answer. All kinds of merchandise.

Question. Estimate the amount of each of the principal articles of such freight.

Answer. One hundred and fifty thousand tons all told. It is impossible to segregate them.

Question. What per cent of this freight comes by the way of Panama, the Straits of Magellan, and the transcontinental railroads?

Answer. Estimated 2 per cent by Isthmus, 8 per cent by Straits of Magellan, 90 per cent by the transcontinental railroads.

Question. What are the freight rates charged on the principal articles by each of these routes?

Answer. As all grades of merchandise are brought by the transcontinental railroads to this port, the proper answer to this question is to refer you to the westbound tariff of the Transcontinental Freight Bureau, 1 G.

The Isthmus rates.—The rates via the Isthmus are 20 per cent less in carload lots and 30 per cent less in less than car lots than all-rail rates, the Pacific Mail Steamship Company

absorbing any local freights from interior points to the eastern seaboard up to 20 cents per hundredweight.

American-Hawaiian Line.—We submit a table showing the rail rates and American-Hawaiian rates on some of the principal commodities purchased in the East. Would state, however, that the American-Hawaiian Line does not publish a tariff and frequently takes freight in quantities at a much less rate.

Comparison of rates from New York to Portland (all rail) v. American-Hawaiian Line.

Articles.	American-Hawaiian Line.		All rail.	
	Carload.	Less than carload.	Carload.	Less than carload.
Canned goods:				
Fruits, vegetables, soups, etc.	\$0.60	\$0.65	\$1.00	\$1.50
Corn, peas, beans, fish, meats.			.95	
Iron, bar, band, hoop, rod.	.55	.60	.75	1.25
Nails and spikes, kegs and cases.	.55	.70	a .80	1.35
Iron pipe, wrought.	.55	.65	b .85	1.25
Pipe fittings.	.55	.70	.65	1.25
Whiskies, cases.	.90	.90	.65	1.25
Whiskies, barrels.	3.75	c 4.00	1.25	1.35
Barb wire.	.55	.75	.80	
Copper wire.	.60	.80		1.75
Wire cloth.	.65	.80		1.60
Saddlery, hardware.	.80	.80		1.75
Currycombs.	.80	.80		1.75
Hames.	.55	.75		1.75
Harness pads.	.75	1.00	1.25	1.75
Paper wrapping, book.	.55	.85	.75	1.10
Paper bags.	.65	.75	1.20	1.75
Paper, building.	.60	.70	1.10	1.75

a Kegs.

b Boxes.

c Per barrel.

Question. What part of this freight that does not come by the way of Panama would it be practicable to ship by that route?

Answer. Nearly all except perishable articles.

Question. If a large part of the freight that could be shipped by the way of Panama is shipped by the other routes, please state the reasons why such shipments is made by other routes.

Answer. Because the rates across the Isthmus have been so adjusted as to draw the bulk of the shipments by all-rail routes. The differentials mentioned above are practically overcome by difference in time absorbed in transportation, marine insurance, chafing, breakage, and deterioration from handling the goods from ship to lighter, lighter to pier, and pier to cars at Colon, and from cars to pier, pier to lighter, lighter to ship at Panama, and from ship to pier and pier to ship at San Francisco.

Question. Is it essential to the commercial interests of Portland that there should be a line of steamers making regular schedule trips between Panama and Portland?

Answer. It certainly is.

Question. What American steamship companies doing business on the Pacific coast have vessels that would be equipped for handling efficiently cargo and passengers between the Pacific ports of the United States and Panama?

Answer. See answer to following question.

Question. Is there any American steamship line that would establish a regular service between Panama and the Pacific coast of the United States if it were given the same privilege as to through bills of lading now held by the Pacific Mail Steamship Company with the Panama Railroad Company? If so, please state the lines.

Answer. Do not know of any at present, but if the contract between the Pacific Mail Steamship Company and the Panama Railway Company were not renewed, and any vessel owners were allowed to receive freight at Panama for transshipment to Pacific coast ports who would put on a regular line, there is no doubt in our mind that more than one line of vessels would be put on this route.

Question. Under normal conditions with rates fixed upon a basis of reasonable compensation for services rendered would there be sufficient business between the Pacific and Atlantic ports of the United States to warrant the establishment of a first-class line of steamers to make regular schedule weekly trips from Pacific coast ports to Panama? Please answer this question in detail, giving the conditions under which, in your judgment, such line would or would not be successful.

Answer. If a line were established and reasonable rates were adopted, there is no doubt in our mind that such a line would receive such ample patronage as to be able to maintain a weekly sailing list to great advantage to themselves and to the citizens of this coast.

Question. Is there any freight originating elsewhere than at Portland and brought here by steamship companies that is transported to the eastern coast of the United States from Portland by rail? If so, please state the character of this freight, the amount, the place where it originates, and the rates charged by the railroad companies for its transportation across the continent.

Answer. Oriental products, teas, silk, spices, matting, works of art, rice, sago, tapioca, and sundries.

Question. Is any freight of this character after it is shipped across the continent reshipped from the eastern ports of the United States to Europe?

Answer. Teas and silks.

Question. Is there now, or has there been in the recent past, any freight shipped to Portland from the eastern coast of the United States, via Europe? If so, please state why such shipments were made by that route.

Answer. Do not know of any. At one time, however, barley was shipped from Portland to Europe thence back to the Atlantic coast of the United States.

Question. State any objections that the commercial interests of Portland may have against the present rate-making system of the Panama Railroad Company.

Answer. As above outlined, it is our opinion that the rates now in force by the Panama route are so adjusted as far as this port is concerned as to draw the freight away from the Panama line and to throw it to the all-rail lines.

Please make any statement not covered by the above questions that you think may have a bearing on the subject of transportation by the way of Panama.

EXHIBIT J 5.

Copy of list of questions submitted to the Chamber of Commerce of Tacoma, Wash., and answers thereto, and letter of Mr. William Jones, president of the chamber of commerce.

SEATTLE, WASH., March 30, 1905.

What kind of freight originates in Tacoma and the vicinity within its commercial radius for shipment to the eastern part of the United States and Europe?

Estimate the amount of each of the principal articles of such freight.

What part of this freight could be successfully transported by the way of Panama?

Are there any articles of such freight that it would not be practicable to ship by the way of Panama? If so, please name the articles and the reason why shipment by the Panama route would be impracticable.

What per cent of the freight that could be successfully shipped by the way of Panama is transported by that route? What part by the Straits of Magellan? What part by the transcontinental railroads? In answering the above questions, please state, if practicable, the per cent of each article that is shipped by the way of the various routes.

Please state, in detail, why any part of the freight that it is practicable to ship by the way of Panama is not shipped by that route.

What are the principal articles of freight shipped from Tacoma to points east of the Allegheny Mountains?

Estimate the amount of each article.

What are the freight rates charged by the railroads on each article?

What is the time consumed in transporting freight by rail from Tacoma to the large eastern cities, namely, Boston, New York, Philadelphia, and Baltimore?

What are the principal articles of freight that are shipped from Tacoma to the Mississippi Valley?

Estimate the amount of each of the principal articles of such freight.

What are the freight rates charged on each of the principal articles of such freight.

What is the average time consumed in shipping by rail to points in the Mississippi Valley?

Is any freight shipped from Tacoma to the Mississippi Valley by the way of Panama or the Straits of Magellan? If so, please state the kind of freight, the amount, and the rates charged.

What are the principal articles of freight received at Tacoma from Europe, the eastern coast of the United States, and the Mississippi Valley?

Estimate the amount of each of the principal articles of such freight.

What per cent of this freight comes by the way of Panama, the Straits of Magellan, and the transcontinental railroads?

What are the freight rates charged on the principal articles by each of these routes?

What part of this freight that does not come by the way of Panama would it be practicable to ship by that route?

If a large part of the freight that could be shipped by the way of Panama is shipped by the other routes, please state the reasons why such shipment is made by other routes.

Is it essential to the commercial interests of Tacoma that there should be a line of steamers making regular schedule trips between Panama and Tacoma?

What American steamship companies doing business on the Pacific coast have vessels that would be equipped for handling efficiently cargo and passengers between the Pacific ports of the United States and Panama?

Is there any American steamship line that would establish a regular service between Panama and the Pacific coast of the United States if it were given the same privilege as to through bills of lading now held by the Pacific Mail Steamship Company with the Panama Railroad Company? If so, please state the lines.

Under normal conditions, with rates fixed upon a basis of reasonable compensation for services rendered, would there be sufficient business between the Pacific and Atlantic ports of the United States to warrant the establishment of a first-class line of steamers to make regular schedule trips weekly from Pacific coast ports to Panama? Please answer this question in detail, giving the conditions under which, in your judgment, such line would or would not be successful.

Is there any freight originating elsewhere than at Tacoma and brought here by steamship companies that is transported to the eastern coast of the United States from Tacoma by rail? If so, please state the character of this freight, the amount, the place where it originates, and the rates charged by the railroad companies for its transportation across the continent.

Is any freight of this character, after it is shipped across the continent, reshipped from the eastern ports of the United States to Europe?

Is there now, or has there been in the recent past, any freight shipped to Tacoma from the eastern coast of the United States via Europe? If so, please state why such shipments were made by that route.

In answering these inquiries it is desired that a full discussion of the subject-matter of each question be given, so that each answer will present a clear and comprehensive statement of all of the facts that have a direct or indirect bearing on the subject.

State any objections that the commercial interests of Tacoma may have against the present rate-making system of the Panama Railroad Company.

Please make any statement not covered by the above questions that you think may have a bearing on the subject of transportation by the way of Panama.

(Signed)

J. L. BRISTOW,
Special Panama Railroad Commissioner.

to the PRESIDENT OF THE CHAMBER OF COMMERCE,
Tacoma, Wash.

TACOMA, WASH., April 27, 1905.

HON. JOSEPH L. BRISTOW,
Special Panama Railroad Commissioner,
Washington, D. C.

DEAR SIR: In addition to the report of the committee appointed by the Tacoma Chamber of Commerce to prepare answers to your interrogatories concerning the Panama Railroad, we wish to add the following:

There is shipped from Tacoma about 150 carloads of wheat starch per annum (80 per cent to the Atlantic coast and 20 per cent to the Mississippi Valley), at 75 cents per hundred, carload lots. This could be shipped to advantage by way of Panama, and particularly by way of the canal. The starch is at its best about ninety days after the date of manufacture. Rehandling will not hurt it except, of course, in cases of breakage. (Shipments are made in barrels.) The amount shipped to the Atlantic seaboard could easily be shipped by way of the Panama Railroad, provided satisfactory rates and through bills of lading could be obtained.

The Tacoma smelter shipped last year 9,850 tons of copper bullion to the refineries in New Jersey, at \$14.50 per ton of 2,000 pounds, in carload lots. This freight could be sent by way of Panama, is cheaply handled, can not be injured by rehandling, the important consideration being whether the amount of money the bullion represents could stand the loss of interest by reason of the additional time taken for the transportation.

N. B.—The Tacoma Smelter is about to erect a copper refinery and engage in the manufacture of copper wire and sheet copper. They are also about to largely extend their copper smelting, so that it is probable that the amount mentioned for shipment to the East would still be continued.

There is shipped from the State of Washington about 4,500 tons of hops per annum, more than one-fourth from this city and county, and 80 per cent of the entire amount is shipped to Great Britain or Germany by rail via New York. Rate, \$2 per hundred to New York; \$2.60 per hundred to London, warehouse delivery. The balance of the hop crop is shipped to various centers of the United States, particularly Milwaukee and St. Louis. Small shipments are made to London by water via Suez direct at \$6.20 per ton of 2,000 pounds.

All this could be shipped by way of the Panama Canal; but, in the absence of a direct steamer line from the eastern terminus of the railroad to Great Britain and Europe, it is doubtful if any could be shipped until the canal is completed. The question of whether the numerous rehandlings would affect the shipment of this article could only be determined after experiment.

There are shipped from Tacoma east by rail about 6,000 carloads of lumber and shingles per annum. From the State of Washington there are about 80,000 carloads shipped per annum. Most of this is marketed in the upper Mississippi Valley. About 2,000 carloads of lumber and 6,000 or 8,000 carloads of shingles are marketed east of the Allegheny Mountains. Freight rate: Lumber, 40 cents per hundred to St. Paul; shingles, 50 cents; to Chicago, 10 cents additional on each, and to eastern points the full local freight rate from Chicago. During lake navigation the rates on shingles are less than during the winter. It is not at all probable that any part of this can be shipped by way of the Panama Railroad by reason of the cost of handling it. It is probable that all of that consumed immediately on the Atlantic seaboard could be shipped by way of the Panama Canal; but, by reason of the cost of handling lumber and shingles, it could not be sent very far west of the Atlantic seaboard. No lumber or shingles are marketed in the lower Mississippi Valley. The southern pine supplies all this market.

The question of shipping flour from the Pacific coast to the Atlantic coast is one of speculation. As a rule, our wheat is 11 cents per bushel lower than Chicago. This would mean from 50 cents to 55 cents less per barrel on flour. Add to this difference the cost of shipping flour from Chicago to the Atlantic seaboard, the Panama Railroad and the canal would have to make a rate of not more than 60 cents per barrel from Tacoma to the Atlantic seaboard in order to secure the business. This rate could easily be given by the canal, and we think it could also be made by the railroad. If rates are made which will permit our flour to get to the eastern seaboard, there is no reason why we should not supply a substantial part of the flour consumed east of the Allegheny Mountains. The present wheat production tributary to the mills of this city is from 55,000,000 to 60,000,000 bushels per annum. The possible production would be over 150,000,000 bushels.

The total pack of canned salmon for Puget Sound will average about 3,000 tons per annum, and of Alaska, which is all handled and shipped through Puget Sound, about 9,000 tons per annum. Of this amount, 300 tons are shipped to the Orient by water and 2,200 tons are shipped to other foreign ports, 80 per cent of it to Great Britain and Europe. The rate to Liverpool is \$8.60 per ton of 2,240 pounds. The balance of nearly 10,000 tons is marketed in the United States. It is impossible to give the localities in which it is consumed, but a very rough estimate would give about 2,000 tons east of the Allegheny Mountains and 3,000 tons in the Southern States. The rate to St. Paul, Chicago, and New York is 75 cents per hundred in carload lots. Shipments to points on or near the Gulf coast and Atlantic coast could be made by way of the canal, and practically all of that to Great Britain and Europe could be shipped that way. The question of shipment by way of the Panama Railroad would depend upon the facilities for handling. Too much jarring would break the boxes and cause leakage of the cans. The foregoing and all tables concerning salmon, unless otherwise stated, include the entire State. The proportion shipped from Tacoma would include about two-thirds of the above shipments by water and about one-half of the amount shipped by rail.

About 500 cars of frozen salmon and 700 cars of pickled salmon per annum are shipped to different points in the United States. A rough estimate would give about 400 cars of the frozen fish to New York and about one-half that amount of pickled. These are shipped in refrigerator cars. Probably none would ever be shipped by the Panama Railroad, but probably all of that to the Atlantic coast and Europe would be shipped by the canal. About 1,000 tons of smoked and pickled salmon is shipped to Hamburg or other European points by rail from Puget Sound in refrigerator cars through New York, the rate to New York being \$1.50 per hundred on frozen and 75 cents on pickled salmon.

About 300 or 400 cars per annum of fresh fish are shipped east from Tacoma in refrigerator cars, 80 per cent to New York and Boston. Probably none of this could be shipped by the Panama Railroad or canal on account of time.

This is to be considered as part of and annexed to the report of our committee, hereto attached, which is made a part of this report.

Respectfully submitted.

TACOMA CHAMBER OF COMMERCE AND BOARD OF TRADE,
WILLIAM JONES, *President*.
J. S. WHITEHOUSE, *Secretary*.

TACOMA, WASH., April 30, 1905.

J. S. WHITEHOUSE, Esq.,

Secretary Tacoma Chamber of Commerce, City.

DEAR SIR: Your committee, appointed for the consideration of particulars asked for by Hon. J. L. Bristow, special Panama Railroad Commissioner, inasmuch as it tends to affect the commerce of Tacoma and vicinity, begs to report as follows:

With the view of condensing our report, we have prepared our remarks under various headings, embracing in each a number of the questions asked, but, of course, they only include the questions which appear to belong to the particular grouping we have made:

Shipments from Tacoma eastward to points in United States and Europe.—These principally consist of lumber, lath, shingles, various manufactures of wood, bullion, wheat, barley, flour, wheat starch, hops, apples, and salmon. We submit herewith an analysis of our harbor-master's report for 1904, from which can be got a fairly accurate idea of the quantity of each of these articles shipped by water. Of course, the harbor-master's report embraces a wider field than the one included in our report, but, in a sense, all of his report has a bearing on the question, seeing that a considerable quantity of our shipments to and from the Orient originate from or terminate in the Eastern States.

In our opinion, under present conditions there is very little of this freight which could successfully be transported by way of Panama. The difficulties in the way are the necessity of so many rehandlings of freight by this route, which is a matter of very serious consideration for any shipper, but more especially for those whose goods in the rehandling might be subjected to breakage, leakage, etc., thus causing excessive shortages, which, with only one handling at point of shipment and another at point of discharge, would be practically avoided. This would practically exclude such freight as grain, flour, canned salmon, and, to a lesser extent, probably lumber products.

As to the percentage of the total freight shipped under above heading, it is rather difficult to arrive at what is now going by the various routes, but, approximately, we would say the following is not out of the way:

Not to exceed 1 per cent by Panama route.

About 59 per cent by Cape Horn or Straits of Magellan.

About 40 per cent by railroad overland.

A larger percentage than the above has undoubtedly gone overland during 1904, but this must be considered exceptional, as it was brought about by a phenomenal demand for our wheat and flour in the Middle and Eastern States. This under ordinary conditions would not be repeated.

What percentage of this freight could successfully be transported by way of Panama is an open question. The percentage, however, in our opinion, could no doubt be materially increased with better handling facilities at the Isthmus. This, however, would only apply to shipments to the eastern seaboard, for until the Panama Canal is an accomplished fact shipments to Europe will continue to go by sail and steam by the Cape Horn route and by steamer via Suez Canal.

Shipments to eastern seaboard, United States.—These are principally lumber and its products, bullion, canned salmon, fresh fish, hops, flour, starch, cascare bark, and apples. The time consumed in transporting these by rail to the eastern seaboard is from three to four weeks.

From statistics beside you you can no doubt fill in the approximate quantity of each, as called for, and as to the freight rates, we leave you to get this data.

Shipments to Mississippi Valley.—These are principally lumber and its products, canned salmon, fruit (including considerable shipments of small fruits, such as blackberries, raspberries, etc.). Particulars to be filled in from your statistics, as well as data regarding railroad rates of freight.

These shipments all go east by railroad. There are no shipments to this territory going by way of Panama or Straits of Magellan.

Shipments from eastern seaboard of United States, Mississippi Valley, and Europe to Tacoma.—These are principally as follows:

From Eastern States: Steel rails, pig iron, and other products of iron, such as steel beams, billets, etc.; tin plates, hardware of all kinds, groceries, chemicals, drugs, and other articles of various description, and, in fact, a good line of most of our wholesale and jobbing stocks, including dry goods, wagons, harness, etc., besides those already mentioned.

From Europe: Cement, pig iron, steel rails and other products of iron, salt, fire bricks, fire clay, chemicals, etc.

A mere fraction of this freight from Eastern States comes by way of Panama, and probably 2 per cent comes by way of Straits of Magellan. The balance comes overland by railroad.

All of the freight from Europe comes by sail round Cape Horn or by steamer by way of Suez Canal. The same reasons hold good for shipment from the eastern seaboard via Panama Railroad, as we have stated above in connection with shipments from here to

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the eastern seaboard, but we hold the opinion that shipments of freight westward from the eastern seaboard could be considerably increased by the Panama route, with better handling facilities at the Isthmus and a direct steamship service from there north to the various points on the Pacific coast. However, as long as conditions exist as at present, whereby the connecting steamship line from Panama only brings the goods to San Francisco, from which point they are transhipped north to Tacoma, we do not think there is much chance of successfully developing this business.

Regarding necessity and practicability of operating line of steamers between Panama and Pacific coast ports, it is, in our opinion, not essential to the commercial interests of Tacoma that there should be a line of steamers making regular schedule trips between Panama and Tacoma as conditions exist to-day, but it would be an advantage to have such a line. In our opinion there is not sufficient business in sight at present to justify the establishment of a first-class line of steamers to make regular weekly trips between Pacific coast ports and Panama to be operated by an individual steamship line. The aggregate of tonnage now carried would, in our opinion, offer no inducement; but, as we have already indicated, with more attractive facilities at Panama, and with an assurance that such steamship line would call at all of the principal cities on the Pacific coast, we believe there is room for a considerable extension of this commerce.

We do not know that there is any steamship line which, if given the same privilege of through bills of lading as the Pacific Mail Steamship Company, would establish a regular service, but we suggest the names of the American-Hawaiian Steamship Company and the Pacific Coast Steamship Company as having vessels now trading in these waters sufficiently equipped to enter this trade.

There are considerable shipments originating in the Orient constantly passing through this port. These include tea, matting, hemp, silk, and other Chinese and Japanese wares. Full particulars of these will be found in the analysis of the harbor master's report already referred to. They all go east by rail—most of them on a through bill of lading from the Orient—shipment being made by the regular steamship lines having traffic arrangements with the railroads.

There has in the recent past been no freight shipped to Tacoma from the eastern seaboard of the United States via Europe.

General remarks.—The general sentiment prevailing with us appears to be that as long as the present arrangement with the Pacific Mail Steamship Company is operative the Panama route will be of little service to the North Pacific coast outside of California, and the remedy suggested is that our Government throw the ports and facilities on both the Atlantic and Pacific sides of the Panama Railroad open to the competition of all steamship lines willing to compete for freight to and from these points. We do not know whether or not this is practicable at this stage, having in view that a good deal of development would be required to bring about volume worth competing for. Believing that competition is the life of trade, it is natural to assume that this course would bring about increase of traffic sooner than any other.

By some the view has been forcefully advocated that our Government procure and assume control of a line of steamers to run between Panama and all north Pacific ports, thereby securing control of both an Atlantic and Pacific steamship service to operate in connection with the Panama Railroad, the object being to use this freight route as a lever to regulate any excessive rates charged by railroads on overland freight, a difficulty the solving of which appears to be a vexed question at this time. We would not care to definitely recommend this course, but it has its merits, and we believe is well worthy of our Government's full consideration.

Respectfully submitted.

L. G. PATTULLO.
CARL L. STEBBINS
LOUIS W. PRATT.

How Tacoma's ocean commerce has grown during the last six years may be shown from a comparison of the harbor master's reports from 1899 to 1904, inclusive. These reports may be briefly summarized as follows:

Year.	Inward cargoes.	Outward cargoes.	Total ocean commerce.
1899	\$8,607,196	\$12,195,915	\$20,803,111
1900	9,058,325	14,858,507	23,916,832
1901	11,495,859	22,904,877	34,400,736
1902	12,544,865	27,886,800	40,431,665
1904	16,531,055	24,719,789	41,250,844

It will be observed from these figures that there has been a steady progress in the ocean commerce of the port of Tacoma, except during the year 1903. This was due to the shrinkage of the wheat crop of 1902. During the year 1902 the shipments of wheat from Tacoma amounted to 11,829,093 bushels, valued at \$8,086,206. The wheat crop in eastern Washington, which in 1901 amounted to 33,000,000 bushels, in 1902 aggregated a trifle less than 20,000,000 bushels, and the exports of wheat from Tacoma during the year 1903 amounted to only 3,836,906, valued at \$3,074,253. As will be seen, this loss in wheat exports accounted for the \$5,000,000 decrease in the ocean commerce of the port in 1903, other gains and losses about balancing each other. The year 1904 shows no improvement over the year 1903 in the item of wheat exports. On the contrary, the wheat exports for 1904, including coastwise shipments to California, amounted to 2,892,838 bushels, valued at \$2,357,504. Here is a falling off in shipments of wheat of nearly 1,000,000 bushels, and a loss in value of more than \$700,000, as compared with 1903, which was an exceptionally light season in wheat exports.

This is accounted for by the fact that for the first time in the commercial history of the Pacific Northwest the wheat of the inland empire has been in great demand for shipment to Minneapolis, Chicago, and other eastern cities, owing to the failure of the wheat crop of the upper Mississippi and Missouri River valleys in 1904. It is estimated that not less than 15,000,000 bushels of wheat, which would otherwise have come to tidewater at Tacoma and Portland, have already been shipped east by rail, or are now being held in railway warehouses awaiting shipment. A large share of this 15,000,000 bushels of inland empire wheat was purchased from the farmers by the Tacoma grain dealers and sold by them for eastern delivery.

WHEAT SHIPMENTS FLUCTUATE.

Wheat shipments fluctuate from year to year, according to the size of the crop and the nature of the market. Tacoma is the most favorably located port in the Pacific Northwest; has the best facilities for the handling of wheat for export, and leads all other ports in this section of the country in the volume and value of its wheat and wheat-flour shipments. The following figures show the volume and value of wheat shipments by water from Tacoma, by years, since 1899:

Year.	Wheat.	Value.
	<i>Bushels.</i>	
1899.....	3,913,780	\$2,428,350
1900.....	4,244,804	2,524,236
1901.....	10,713,826	6,320,822
1902.....	11,829,093	8,086,206
1904.....	2,892,838	2,357,504

Of the shipments of wheat from Tacoma in 1904 more than 1,000,000 bushels were shipped coastwise to California.

WATER SHIPMENTS OF FLOUR.

Wheat-flour shipments in 1904 were somewhat less than in either 1902 or 1903, but were more than double in quantity and value the flour shipments from Tacoma five years ago. The harbormaster's record of shipments of flour, foreign and coastwise, from the port of Tacoma during the last six years is as follows:

Year.	Flour.	Value.
	<i>Barrels.</i>	
1899.....	500,979	\$1,517,740
1900.....	738,937	2,175,173
1901.....	924,744	2,653,516
1902.....	1,351,224	4,039,543
1903.....	1,294,527	4,685,587
1904.....	1,013,933	3,857,925

CARGO SHIPMENTS OF LUMBER.

The cargo shipments of lumber from the port of Tacoma during the last six years, in quantity and value, were as follows:

Year.	Lumber.	Value.
	<i>Feet.</i>	
1899.....	82,472,580	\$217,355
1900.....	77,818,557	922,540
1901.....	78,810,265	797,352
1902.....	108,645,364	1,179,927
1903.....	129,036,317	1,735,018
1904.....	95,717,635	1,065,827

The conditions which have affected the lumber mills of the Pacific Northwest, and, indeed, of all sections of the country, during the year 1904, naturally produced their effect upon the cargo shipments from this port. A decline of 33,000,000 feet in the shipments from Tacoma is about in proportion to the decreased output for the year, and fairly reflects the temporary slackness which 1904 witnessed in the lumber trade. It will be seen, however, that Tacoma's cargo shipments of lumber in 1904 exceeded by more than 15,000,000 feet the record of any previous year, with the exception of 1902 and 1903, when the demand in California and abroad was the heaviest ever known.

SHIPMENTS OF COAL.

The following is the record by years of coal shipments from the port of Tacoma during the last six years:

Year.	Coal.	Value.
	<i>Tons.</i>	
1899.....	470,234	\$1,401,032
1900.....	607,164	1,833,169
1901.....	636,106	2,013,537
1902.....	375,183	1,227,005
1903.....	488,725	1,628,014
1904.....	403,530	1,306,089

Coal is also one of the natural products of western Washington, which seeks an outlet through the port of Tacoma. Cargo shipments of coal from the port of Tacoma in 1904 amounted to 403,530 tons, valued at \$1,306,089. Of this, 6,815 tons, valued at \$43,247, were exported in sacks to foreign countries, while the balance of 393,715 tons represents the shipments coastwise to San Francisco and other American ports. Coal shipments show a decrease of 75,000 tons, as compared with the shipments in 1903, and an increase of 28,000 tons as compared with 1902. There is no overlooking the fact that the California market for the coal of western Washington has been seriously affected by the discovery of oil in southern California and the increase in its use for fuel purposes.

ENORMOUS TRAFFIC AT THE SMELTER.

The largest and most important item in the ocean commerce of the port of Tacoma during the last year was the receipt of ores and concentrates at the Tacoma smelter and the shipments of bullion therefrom. The enormous sum paid by this single manufacturing concern for ocean and railway freights is shown in the first section of this issue, on page 5. The harbor-master's records show that during the year the bullion shipped by water from the smelter was valued at \$4,293,280. This item, the largest item in the detailed statement of outward cargoes shipped from this port during the year, represents the product of a single industry in this city. It exceeds in value the shipments of flour from this port by more than \$400,000, and while the latter represents, to a considerable extent, the value of the product of Tacoma mills, it includes, also, flour shipped by rail to Tacoma from Portland and interior milling points; but the bullion shipments from the Tacoma smelter represent, as before stated, the contribution of a single Tacoma industry to the ocean commerce of the port. As most of the ores received at the smelter are brought by water to its wharves, it is also evident that this item must represent a large share of the inward cargoes received at Tacoma.

SHIPMENTS OF CANNED SALMON.

During the year 1904, 319,227 cases of canned salmon, valued at \$1,996,757, were exported from the port of Tacoma. The salmon exported from this port is either canned on the sound or at British Columbia or Alaska canneries, and is assembled at Tacoma for distribution.

SHIPMENTS OF BARLEY.

Another item of a Washington production which makes a fair showing in the harbor-master's report for 1904 is the export of 541,855 bushels of barley grown in eastern Washington, valued at \$320,943.

MERCHANDISE FOR ALASKA.

The jobbers of Tacoma have a large trade in Alaska. The records of the harbor master's office show that during the year 1904 merchandise to the value of \$812,579 was shipped to Alaska from this port. Under a recent change in the law it is necessary to obtain shipping permits in order to transport merchandise to the noncontiguous territory of the United States, and manifests are filed at the custom-house when the permits are applied for. During the last two years there has, therefore, been an accurate and reliable record of shipments from Alaska to Puget Sound, and vice versa. The trade of Alaska is shared by the wholesalers and jobbers of Seattle, San Francisco, Tacoma, and Portland.

LOCAL ORIGIN OF TRAFFIC.

In the foregoing partial review of some of the principal articles which enter into the ocean traffic from Tacoma, nothing has been mentioned which is not a native product of the region of which Tacoma is the natural assembling and distributing point. While these items do not by any means represent the full share of the outward cargoes from this port which originate in the section of the country tributary to Tacoma, they are sufficient to show that the great bulk of the traffic is of local origin. The shipments in 1904 of bullion from the Tacoma smelter, wheat and wheat flour, salmon, coal, lumber, barley, and general merchandise to Alaska, amount in value to \$16,010,904, as follows:

Articles.	Quantity.	Value.
Bullion.....		\$4,293,280
Flour.....	1,013,933 barrels.	3,857,925
Wheat.....	2,892,838 bushels.	2,357,504
Canned salmon.....	319,227 cases.	1,996,757
Coal.....	403,530 tons.	1,306,089
Lumber.....	95,717,635 feet.	1,065,728
Barley.....	541,855 bushels.	320,943
General merchandise to Alaska.....		812,579
Total (eight items).....		16,010,904

The total outward cargoes from Tacoma during the year 1904 were valued at \$24,719,789. The foregoing items represents 65 per cent of the total shipments of merchandise by water from this city. This is really a remarkable showing, as it indicates that far more than two-thirds of the total cargoes which are carried from this city originate in Tacoma, or in the country tributary to it, and represent the native products of the Pacific Northwest—products of the farms, the forests, the mines, and the waters. To a very considerable extent, also, these native products have been increased in value prior to their shipment by manufacture in the mills of Tacoma into finished products.

OTHER ARTICLES OF LOCAL PRODUCTION.

There are many other articles of native production which enter into the statement of outward cargoes from this port. Among them may be mentioned oats, flaxseed, cattle and hides, potatoes, box shooks, hay, feed, cedar poles, salted meats and fish, mutton, bottled beer, furniture, hops, and other products, which amount in the aggregate for the year to many hundred thousand dollars. Exports of products not originating in this vicinity amount also to a considerable sum, chief among them being raw cotton and domestics, of which during the year 1904, the exports from Tacoma were valued at \$2,919,490.

PRODUCTS FROM THE EAST AND SOUTH.

There were also large exports from this city of tobacco, steel rails, machinery, and miscellaneous merchandise, which was brought to Tacoma from the east by the Northern Pacific Railway, and shipped from this port by the various steamship lines operating to and from the Orient and other foreign ports. The most interesting and significant fact, however, in connection with the study of Tacoma's ocean commerce is that the great bulk of the outward cargoes represent the industry and effort of the people of Tacoma and the State of Washington.

INCREASE IN IMPORTS.

The increase which will be noted in the foregoing statement of inward cargoes during the year 1904, as compared with any previous year in the history of the port, is chiefly due to the large receipts of Manila hems which were brought to Tacoma during the year from the Philippines by the steamships of the Boston Steamship Company, regularly operated between this port and Manila. Prior to November, 1903, no Manila hemp was imported into the United States by the Pacific route, but was carried by foreign vessels to New York, Boston, or Philadelphia via the Suez Canal and Mediterranean route. The Boston Steamship Company's line, now operating across the North Pacific, handles a large share of the hemp imported into this country, and will doubtless continue to do so, discharging it for distribution at the port of Tacoma.

Rail shipments of lumber and shingles from Tacoma during the years 1900-1904, inclusive, by months.

Months.	Lumber (cars).					Shingles (cars).				
	1904.	1903.	1902.	1901.	1900.	1904.	1903.	1902.	1901.	1900.
January.....	260	260	288	166	167	77	70	25	44	41
February.....	381	337	349	191	184	103	75	59	83	74
March.....	401	544	441	256	283	96	106	137	90	79
April.....	397	449	461	250	239	111	117	109	110	65
May.....	457	497	493	322	240	106	121	97	94	65
June.....	434	479	471	332	162	84	144	39	86	72
July.....	363	382	447	349	189	64	140	89	126	85
August.....	414	421	446	318	145	134	106	119	107	63
September.....	318	352	418	247	135	140	86	106	67	58
October.....	345	350	415	326	172	135	111	136	119	70
November.....	303	256	354	305	165	151	125	87	99	73
December.....	285	380	359	348	149	111	104	88	85	66
Total.....	4,358	4,707	4,932	3,410	2,330	1,312	1,305	1,091	1,110	811

The collector of customs of the Puget Sound customs district reports that the total imports of the district for the year 1904 amounted in value to \$8,608,485, and the exports of domestic merchandise to \$26,777,262. The foreign trade of the district for the year 1904 is credited to the two leading and the other minor ports of the district in the following proportions:

Ports.	Imports.	Exports.	Total foreign commerce.
Tacoma.....	\$4,858,249	\$13,759,758	\$18,618,007
Seattle.....	2,268,280	7,927,940	10,196,220
Minor ports.....	1,481,956	5,089,565	6,571,521
Total.....	8,608,485	26,777,263	35,385,748

Of the imports of the district in 1904 Tacoma handled 56.5 per cent, Seattle 26.3 per cent, and the other 14 ports 17.2 per cent.

Of the exports of the district, Tacoma handled 51.4 per cent, Seattle 29.6 per cent, and the other ports of the district 19 per cent.

Portland is generally credited with the entire foreign trade of the Willamette customs district, of which it is the leading port. The entire foreign trade, imports and exports combined, of the Willamette customs district for 1904 was less than that of Seattle. Tacoma's foreign trade in 1904 was almost as large as the foreign trade of Seattle and Portland combined.

Columns of figures could be presented to show the details of the foreign commerce of these North Pacific coast ports. It is quite unnecessary to do so, as the figures may be found in the official publications of the Bureau of Statistics and examined in every particular.

The imports credited to Tacoma and other ports by the customs officials do not include foreign merchandise received and forwarded in bond to interior ports without appraisement. During the year 1904 merchandise to the value of \$4,379,975 was so received and forwarded through the Puget Sound district, the bulk of which was discharged at Tacoma.

Tacoma is the chief loading port on Puget Sound for several lines of steamships operating between Puget Sound and the Orient, Liverpool and Glasgow by way of the Orient, the Suez Canal, and the Mediterranean, Hamburg by way of Mexican, Central, and South American ports, and New York by way of Honolulu, besides lines to Alaska and San Francisco.

The steamship lines now operating over these routes are the Boston Steamship Company and the Boston Tow Boat Company to Manila and Oriental ports; The Great Northern Steamship Company, whose mammoth new steamships *Minnesota* and *Dakota* are the largest American-built vessels afloat; the Nippon Yusen Kaisha, Japanese line, which has heretofore operated in connection with the Great Northern only; the Ocean Steamship Company (Limited) and the China Mutual Steamship Company (Limited), which operate a large fleet of modern freighters between Tacoma and Liverpool; the Kosmos Line, to Hamburg, and the American-Hawaiian Line to Honolulu and New York.

There were 74 sailings by vessels of these lines from Tacoma in 1904.

The record cargo in value ever taken from a North Pacific port was loaded at Tacoma and cleared on October 27 for the Orient and Liverpool on the *Telemachus*, of the "Blue Funnel," or Ocean Steamship Company's line.

Another record made by Tacoma in 1904 was the shipment of 91,080 barrels of flour for the Orient by the *Oanfa*, of the same line, on August 31. This was the largest flour shipment ever carried on a single vessel in the world.

Tacoma holds the records for the largest lumber, flour, and wheat cargoes ever loaded on a vessel.

Tacoma's ocean commerce for 1904, tabulated from monthly reports of Harbor Master R. M. Mountfort.

Deep-sea arrivals.....	741
Inward registered tonnage.....	896,595
Inward cargo tonnage.....	213,135
Value of inward cargoes.....	\$16,531,699
Deep-sea departures.....	760
Outward registered tonnage.....	909,628
Outward cargo tonnage.....	858,118
Value of outward cargoes.....	\$24,719,789
Total ocean commerce, tons.....	1,071,226
Total value of merchandise.....	\$41,250,844

The following table shows the foreign and coastwise receipts at, and the foreign and coastwise shipments of merchandise from, the port of Tacoma during the calendar year 1904, by months:

Month.	Receipts.			Shipments.			Total ocean commerce.
	Foreign.	Coastwise.	Total.	Foreign.	Coastwise.	Total.	
January.....	\$1,186,313	\$444,192	\$1,630,505	\$2,191,506	\$774,959	\$2,966,245	\$4,596,750
February.....	444,796	370,205	815,001	860,435	748,528	1,608,963	2,423,964
March.....	1,123,546	537,512	1,661,058	1,067,711	1,044,196	2,111,907	3,772,965
April.....	880,210	418,590	1,298,800	391,681	795,118	1,186,799	2,485,599
May.....	740,871	448,635	1,189,506	791,756	887,543	1,679,299	2,868,805
June.....	1,048,527	586,725	1,635,252	342,699	777,707	1,119,806	2,755,058
July.....	666,486	688,216	1,354,702	292,543	647,911	940,454	2,295,156
August.....	347,613	588,725	936,338	989,121	793,008	1,782,129	2,718,467
September.....	553,813	500,542	1,114,355	1,154,976	884,498	2,039,474	3,153,829
October.....	773,716	755,062	1,528,778	2,908,039	680,621	3,547,650	5,077,028
November.....	1,580,875	593,921	2,174,796	2,194,084	695,269	2,889,353	5,064,149
December.....	636,590	554,774	1,191,364	2,272,529	575,181	2,847,710	4,039,074
Total.....	9,083,356	6,547,099	16,531,055	15,456,870	9,262,919	24,719,789	41,239,844

EXHIBIT J 6.

Copy of list of questions submitted to the board of trade of New Orleans, and answers thereto, and letter of Fred Muller, secretary of the board of trade.

NEW ORLEANS, LA., April 18, 1905

What kind of freight originates in New Orleans and the vicinity within its commercial radius for export? In answering this question, define what you consider the commercial radius of New Orleans.

What is the extent of the commerce between New Orleans and the Pacific coast ports of the United States, Mexico, Central and South America?

By what routes does this commerce go; that is, what per cent by rail to Pacific coast ports of the United States, what per cent by the Isthmus of Panama, and what per cent by the Straits of Magellan?

Is there any freight shipped from New Orleans by rail to the Pacific coast ports of the United States and then reshipped to ports in Mexico, Central and South America?

Are there any impediments of any kind that prevent the full development of commerce between New Orleans and the Pacific coast ports of Mexico, Central and South America? If so, please state fully what such impediments are.

What are the principal articles of freight that originate within the commercial radius of New Orleans that are shipped by rail to Pacific coast ports of the United States? Estimate the amount of each of the principal articles, and state the freight rates charged by the railroads upon each article to the places of destination; that is, the rate to San Diego, Los Angeles, San Francisco, etc.

How much of this freight would it be practicable to ship by the way of Panama? If there is any part of this freight that could not be shipped by the way of Panama, state why it could not be shipped by that route.

State the principal articles that could be shipped by the Panama route, and the amount of each.

If freight has not moved by the way of Panama, please state the reasons why.

What is the time consumed in transporting freight from New Orleans to San Francisco, Los Angeles, and San Diego by rail?

How much freight that originates within the commercial radius of New Orleans is shipped to oriental countries?

What per cent of such freight goes by all-water routes, that is, via the Suez Canal or the Straits of Magellan, and what per cent by part rail and part water?

Give the rates charged on the principal articles by each of the above-mentioned routes.

Are there any products that originate within the commercial radius of New Orleans that can not be successfully exported to the western coast of the United States, Mexico, Central and South America, and the Orient, but that could be with improved shipping facilities by the way of Panama?

What are the principal articles of freight received at New Orleans from the Orient and from the western coast of the United States, Mexico, Central and South America?

Estimate the amount of each of the principal articles of such freight.

What per cent of this freight comes by the transcontinental railroads, what per cent by all water, and what per cent by Panama?

What are the freight rates charged on the principal articles by each of these routes?

What part of this freight that does not come by the way of Panama would it be practicable to ship by that route?

If a large part of such freight that could be shipped by the way of Panama is shipped by other routes, please state why shipment is made by other routes.

What are the present shipping facilities between New Orleans and Colon?

Are there any impediments that prevent the free movement of commerce between New Orleans and Colon? If so, please state in detail what these impediments are.

Is it assential to the commercial interests of New Orleans that there should be a line of steamers making regular schedule trips between New Orleans and Colon?

Is there any American steamship line that would establish a regular service between New Orleans and Colon if it were given the privilege of through bills of lading from New Orleans to Pacific coast ports of the United States by the way of Panama, with connecting lines on the Pacific coast?

Would there be sufficient business between New Orleans, Colon, Panama, and Pacific coast ports of the United States, Mexico, Central and South America to warrant the establishment of a first-class line of steamers making regular schedule weekly trips between New Orleans and Colon? Please answer this question in detail, giving the conditions under which, in your judgment, such line would or would not be successful.

Is there any freight originating outside of the United States that is shipped by water to any of the Pacific coast ports of the United States, thence by rail to New Orleans, thence by water to Europe, the eastern coast of the United States, Mexico, or South America? If so, please state the character of this freight, the amount, the places where it originates, and the rates charged by the railroad companies for its transportation across the continent, and the rates by water to its destination.

Is there any freight originating on the eastern coast of the United States, in Europe, or on the eastern coast of Mexico or South America that is shipped by water to New Orleans and thence by rail to the Pacific coast of the United States, and is any of such freight transhipped by water to Alaska or the Orient? If so, please state the freight rates charged from the points where it originates by water to New Orleans and from New Orleans to the Pacific coast ports of the United States or the places of its destination.

What are the wharfage facilities of New Orleans?

What is the depth of the channel to the Gulf at low water?

In answering these inquiries, it is desired that a full discussion of the subject-matter of each question be given, so that each answer will present a clear and comprehensive statement of all the facts that have a direct or indirect bearing upon the subject.

State any objections that the commercial interests of New Orleans may have against the present commercial policy and rate-making system of the Panama Railroad Company.

Please make any statement not covered by the above questions that you think may have a bearing on the subject of transportation by the way of Panama.

(Signed)

J. L. BRISTOW,
Special Panama Railroad Commissioner.

To the PRESIDENT OF THE BOARD OF TRADE.

NEW ORLEANS BOARD OF TRADE (LIMITED),
New Orleans, May 5, 1905.

Hon. J. L. BRISTOW,

Special Panama Railroad Commissioner, Washington, D. C.

DEAR SIR: Referring to consultation between your good self and our Panama committee, and the questions propounded by you under date of April 18, 1905, we now have the pleasure to submit to you the following data:

In order to cover your inquiries thoroughly and exhaustively, and to fully review the situation so that it will enable you to judge for yourself as to the advantages New Orleans affords as a commercial center and export outlet, it unavoidably became necessary to go into more details than might be desirable. Yet, in order to answer the questions intelligently, it was deemed essential to do so.

Question 1. What kind of freight originates in New Orleans and the vicinity within its commercial radius for export? In answering this question, define what you consider the commercial radius of New Orleans.

Answer. The commercial radius of the city of New Orleans covers the States lying between the Alleghenies and the Rocky Mountains, and particularly the States of Minnesota, South Dakota, Iowa, Illinois, Ohio, Indiana, Kansas, Missouri, Arkansas, Texas, Indian Territory, Oklahoma, Tennessee, North and South Carolina, Georgia, Alabama, Florida, Mississippi, and Louisiana.

The freight originating within this commercial radius comprises wheat, corn, oats, hay, produce, dairy products, fruits, vegetables, poultry, manufactures, cement, coal, coke, iron, manufactures of iron and steel, lead, zinc, lumber, phosphate, cotton, petroleum, rice, sugar, salt, sulphur, rosin, turpentine, cotton-seed products, oysters, shrimp, and fish.

In claiming the above territory as belonging to the commercial radius of the city of New Orleans, we take as a basis the fact that the territory is nearer by mileage to the port of New Orleans than to New York.

A few instances are herewith given:

Short rail distance.

City.	New York.	New Orleans.	City.	New York.	New Orleans.
	Miles.	Miles.		Miles.	Miles.
Minneapolis.....	1,334	1,280	Nashville.....	987	557
Duluth.....	1,390	1,340	Knoxville.....	735	602
St. Paul.....	1,322	1,268	Chattanooga.....	846	491
Sioux Falls.....	1,443	1,261	Charlotte.....	608	743
St. Louis.....	1,422	1,172	Charleston.....	739	775
Omaha.....	1,402	1,070	Atlanta.....	876	495
Dubuque.....	1,079	988	Augusta.....	796	666
Chicago.....	912	912	Savannah.....	854	680
Kansas City.....	1,385	878	Memphis.....	1,156	394
St. Louis.....	1,058	700	Denver.....	1,932	1,356
Indianapolis.....	818	827	Montgomery.....	1,051	321
Cincinnati.....	757	830	Birmingham.....	990	349
Louisville.....	867	748			

Question 2. What is the extent of the commerce between New Orleans and the Pacific coast ports of the United States, Mexico, Central and South America?

Answer. The extent of commerce between New Orleans and the Pacific coast ports of the United States, Mexico, Central and South America is at this time very limited.

The following figures on this subject, compiled for the year ending June 30, 1904, will give a clear insight into the comparatively small business now done by the port of New

Orleans, not only with the west coast, but in some instances with the east coast of Central and South America and Mexico, notwithstanding her proximity to these localities:

From—	Imports into New Orleans.	Total into United States.	From—	Imports into New Orleans.	Total into United States.
Honduras.....	\$847,624	\$2,047,981	Colombia.....	\$211,596	\$7,949,211
Costa Rica.....	707,823	3,529,088	Venezuela.....	6,675	6,878,348
Nicaragua.....	578,784	1,578,807	Argentina.....		9,835,161
Guatemala.....	145,106	2,601,841	Chile.....		10,775,810
British Honduras.....	150,036	636,534	Peru.....		2,899,915
Panama.....		440,747	Uruguay.....		1,644,413
Mexico.....	5,592,734	43,633,275	Ecuador.....		2,350,493
Brazil.....	8,761,602	76,152,745			

To—	Exports from New Orleans.	Total from United States.	To—	Exports from New Orleans.	Total from United States.
Honduras.....	\$921,597	\$1,527,387	Colombia.....	\$238,250	\$4,660,891
Costa Rica.....	545,049	1,936,369	Venezuela.....		3,165,465
Nicaragua.....	1,023,978	1,837,682	Argentina.....		16,002,017
Guatemala.....	217,355	1,281,342	Chile.....		4,824,857
British Honduras.....	804,139	1,070,449	Peru.....		3,961,360
Panama.....	47,430	979,724	Uruguay.....		1,362,708
Mexico.....	1,432,555	45,844,729	Ecuador.....		2,135,321
Brazil.....		11,046,856			

From these figures it will be seen that, while New Orleans has trade relations, both imports and exports, with Honduras, Guatemala, Nicaragua, Panama, and Mexico, its relations with Brazil, Chile, Argentina, Venezuela, Peru, Uruguay, and Ecuador are practically nil, with the exception of the import business from Brazil, which covers shipments of coffee from that country.

It will also be seen that an immense trade is being carried on between the United States and Mexico, of which New Orleans is hardly getting a fair share.

Question 3. By what routes does this commerce go; that is, what per cent by rail to the Pacific coast ports of the United States, what per cent by the Isthmus of Panama, and what per cent by the Straits of Magellan?

Answer. The import and export traffic carried on by New Orleans with the countries named in answer to question 2 is at present taken care of by fruit steamers plying between New Orleans and the countries south of us.

The import business from Brazil, as mentioned before, consists mainly of coffee, and the steamers carrying these goods are those of the British Steamship Line of Lamport & Holt.

At present the percentage of cargo moving between New Orleans and the Pacific coast of the United States is too nominal to classify.

Taking into consideration the figures on hand showing the movement of merchandise between New York and San Francisco via the Isthmus of Panama during the year ending June 30, 1904, it must be conceded that, with proper facilities, New Orleans should get a proportion of this business.

The figures are as follows:

Movement of merchandise between New York and San Francisco via the Isthmus of Panama.....	\$5,178,703
Movement of merchandise between San Francisco and New York via the Isthmus of Panama.....	3,130,311

The movement of vessels between the Atlantic and Pacific ports of the United States via Cape Horn during the year ending June 30, 1904, shows the following:

Ports.	Number of vessels.	Tons.
Baltimore to San Francisco.....	5	13,988
Newport News to San Francisco.....	1	975
New York to San Diego.....	3	13,126
Norfolk to San Francisco.....	1	8,750
New Orleans to San Francisco.....	1	793
Hawaii to New York.....	5	13,968
Puget Sound to New York.....	5	21,112
Philadelphia to San Francisco.....	1	2,916
San Francisco to New York.....	12	40,124

Question 4. Is there any freight shipped from New Orleans by rail to the Pacific coast ports of the United States and then reshipped to ports in Mexico, Central and South America?

Answer. Very little; too insignificant to classify.

Question 5. Are there any impediments of any kind that prevent the full development of commerce between New Orleans and the Pacific coast ports of Mexico, Central and South America? If so, state fully what such impediments are.

Answer. The combination between the Panama Railroad Company and the different steamship lines from New York and other points excluded in the past all competition from New Orleans, since steamers from here were outside of the agreement to discharge goods at Colon for transshipment via the Panama Railroad.

This has made competition impossible in the past. Since the Government has promised to remove this obstacle, by allowing everybody to ship goods over the Panama Railroad on the same fixed basis to all, New Orleans will soon be enabled to enter the field as a strong competitor of the New York lines.

Question 6. What are the principal articles of freight that originate within the commercial radius of New Orleans that are shipped by rail to Pacific coast ports of the United States? Estimate the amount of each of the principal articles, and state the freight rates charged by the railroads upon each article to the places of destination; that is, the rate to San Diego, Los Angeles, San Francisco, etc.

How much of this freight would it be practicable to ship by the way of Panama? If there is any part of this freight that could not be shipped by the way of Panama, state why it could not be shipped by that route.

Answer. The principle articles of freight shipped from New Orleans to the Pacific coast are cotton, sugar, rice, general merchandise, and imports, such as coffee, iron, steel, and general merchandise.

The effect of the combination between the Panama Steamship Company and the Panama Railroad and the continental railroads has been very far-reaching. It not only put New Orleans to a great disadvantage when doing business with the city of Panama and points along the railroad, but the same disadvantages have been experienced whenever New Orleans merchants have tried to do business with the Pacific coast of Costa Rica, Nicaragua, Salvador, Spanish Honduras, and Mexico.

Just to cite one instance, it may be stated right here that, while the short rail route from New Orleans to San Francisco is 2,456 miles, against the distance from New York via Chicago, Council Bluffs, and Union Pacific of 3,237 miles; or, in other words, a difference of 781 miles in favor of New Orleans, the rate of freight on the commodities below mentioned is as follows (per hundredweight):

Articles.	New Orleans to San Francisco.	New York to San Francisco.
Iron.....	\$0.75	\$0.75
Sugar.....	1.65	1.65
Coffee, green.....	.90	.90
Coffee, roasted.....	1.10	1.10
Rice.....	.55	.75

Under readjusted conditions New Orleans should secure at least 50 per cent of the goods heretofore shipped from New York via Panama.

Question 7. State the principal articles that could be shipped by the Panama route, and the amount of each.

Answer. All manufactures of iron and steel that originate in the Birmingham district; the manufactures of leather, such as shoes and saddlery; also tin and enamel ware, rice and sugar; also imported goods from Europe and other parts of the world, such as dry goods, cement, cutlery, chemicals, machinery, coffee, and numerous other articles which it would be difficult to classify.

In this connection we would like to emphasize that goods from the Middle West can be brought down by the river to New Orleans, and thence transshipped by steamers to the Isthmus and the west coast of the United States, Central and South America, and the Orient much cheaper than by all rail.

Question 8. If freight has not moved by the way of Panama, please state the reason why.

Answer. The reason is the same as mentioned before. No steamship line not connected with the close combination between the Panama Steamship Company and the Panama Railroad Company has been allowed to deliver goods through the ports of Colon and Panama for transshipment to other points.

Question 9. What is the time consumed in transporting freight from New Orleans to San Francisco, Los Angeles, and San Diego by rail?

Answer. All the way from eight to thirty days.

Question 10. How much freight that originates within the commercial radius of New Orleans is shipped to oriental countries?

Answer. Cotton is shipped to the Orient, but none of it via New Orleans. The most remarkable feature is that cotton, a southern product, is being forwarded to Tacoma, and thence to Japan and other ports of the Orient at rates which, at the present time, it would be difficult for New Orleans to compete with, owing to the fact that the rates via Colon and Panama to the oriental ports have been prohibitive.

The exportation of cotton, comparing the seven months ending March 31, 1904, with the same period for 1903, from Puget Sound, show an increase from 26,012 bales to 68,741 bales, indicating a heavy transcontinental movement for transshipment at our Pacific ports.

In this connection it may also be stated that the exportation of cotton from San Francisco for the same period shows an increase from 12,355 bales to 89,724 bales.

Question 11. What per cent of such freight goes by all-water routes—that is, via the Suez Canal or the Straits of Magellan—and what per cent by part rail and part water?

Answer. As far as New Orleans is concerned, the only direct shipments which have up to this time been made were the following:

To Kobe, Japan.	Cotton.
	Bales.
November 18, 1899.....	8,971
January, 1900.....	16,569
February, 1900.....	3,237
March, 1900.....	5,951

Question 12. Give the rates charged on the principal articles by each of the above-mentioned routes.

Answer. This question is answered by the negative answer to question 11.

Question 13. Are there any products that originate within the commercial radius of New Orleans that can not be successfully exported to the western coast of the United States, Mexico, Central and South America, and the Orient, but that could be with improved shipping facilities by the way of Panama?

Answer. Yes; all commodities mentioned in answer to question 7.

Question 14. What are the principal articles of freight received at New Orleans from the Orient and from the western coast of the United States, Mexico, Central and South America?

Answer. From the Orient, matting, silks, tea, and assorted Japanese merchandise.

From the west coast of the United States, wine, dried and canned fruits.

From Mexico, Central and South America, hemp, sisal grass, hides, skins, bones, nitrate, fruits, nuts, mahogany, coffee, india rubber, and hats.

Question 15. Estimate the amount of each of the principal articles of such freight.

Answer. The data on hand does not permit of a proper division of such goods which come from the west coast and those coming from the east coast of Mexico, Central and South America. Therefore the following data, which is the latest available, and covers principal articles imported from December 1, 1903, to December 1, 1904, only partly answers the question:

FREE OF DUTY.

	Quantity.	Value.
Coffee.....	pounds.. 153,003,202	\$11,542,22
Tampico fiber.....	tons.. 81	4,608
Sisal grass.....	do.. 29,652	3,795,430
Fruits and nuts of all kinds.....	do..	2,482,943
India rubber.....	pounds.. 480,976	296,760
Tea.....	do.. 79,840	10,862
Mahogany.....	M feet.. 5,796	279,920

DUTIABLE.

Panama hats.....		\$16,761
Hides of cattle.....	pounds.. 26,448	3,708
Matting.....	square yards.. 1,077,505	83,218
Silks.....		9,724

For complete details refer to Twenty-second Annual Report of the New Orleans Board of Trade, pages 24, 25, and 26.

Question 16. What per cent of this freight comes by the transcontinental railroad, what per cent by all water, and what per cent by Panama?

Answer. Nearly 90 per cent of all goods from the west coast of the United States comes by all rail.

Question 17. What are the freight rates charged on the principal articles by each of these routes?

Answer. The freight rates charged from the west coast of the United States, or rather from California points to New Orleans, as compared with those fixed from the same territory to New York, are more favorable to New Orleans than to New York.

You will remember that answer to question 6 showed that the rate from the east coast to the west coast favored New York, as against New Orleans.

The difference in favor of New Orleans from the west coast is as follows: First class, 50 cents; second class, 50 cents; third class, 35 cents; fourth class, 25 cents; fifth class, 20 cents.

Question 18. What part of this freight that does come by the way of Panama would it be practicable to ship by that route?

Answer. With proper steamship facilities, nearly all of the commodities mentioned would come that way, but the business would be materially stimulated.

Questions 19 to 24. Dealt with in one answer:

19. If a large part of such freight that could be shipped by the way of Panama is shipped by other routes, please state why shipment is made by other routes.

20. What are the present shipping facilities between New Orleans and Colon?

21. Are there any impediments that prevent the free movement of commerce between New Orleans and Colon? If so, please state in detail what these impediments are.

22. Is it essential to the commercial interests of New Orleans that there should be a line of steamers making regular schedule trips between New Orleans and Colon?

23. Is there any American steamship line that would establish a regular service between New Orleans and Colon if it were given the privilege of through bills of lading from New Orleans to Pacific coast ports of the United States by the way of Panama, with connecting lines on the Pacific coast?

24. Would there be sufficient business between New Orleans, Colon, Panama, and Pacific coast ports of the United States, Mexico, Central and South America to warrant the establishment of a first-class line of steamers making regular schedule weekly trips between New Orleans and Colon? Please answer this question in detail, giving the conditions under which, in your judgment, such line would or would not be successful.

Answer. Since these questions are interdependent, the following explanation is given:

The present steamship facilities between New Orleans and Colon are those of a fruit line. This service can hardly be considered as comprehensive for the carrying of general cargo and passengers. While these fruit steamers perhaps have been able up to this time to fill the limited requirements of this trade, it is anticipated that, with the development and additional needs for canal construction, unless a proper general cargo steamship service is maintained between New Orleans and Colon, and thence via the Panama Railroad to the western coast of the United States, Central and South America, New Orleans will be deprived of that share of the business which by rights should come to her.

The passenger service has up to this time also been a cause of considerable complaint, as the fruit steamers, for reasons of their own, have discouraged the carrying of passengers during the summer time. This acted as a drawback to New Orleans, since passengers going to New York would supply their commercial wants in the east.

Recently the United Fruit Company has placed one general cargo boat, the steamship *Saphir*, in this market to ply between New Orleans and Colon.

A further disadvantage under which New Orleans is laboring at this time is the fact that the United States Government is running the Panama steamship line entirely from the port of New York, when it is claimed by New Orleans interests that it would be but fair to allot a part of this line to our city.

Questions 25 and 26 dealt with in one answer:

25. Is there any freight originating outside of the United States that is shipped by water to any of the Pacific coast ports of the United States, thence by rail to New Orleans, thence by water to Europe, the eastern coast of the United States, Mexico, or South America? If so, please state the character of this freight, the amount, the places where it originates, and the rates charged by the railroad companies for its transportation across the continent, and the rates by water to its destination.

26. Is there any freight originating on the eastern coast of the United States, in Europe, or on the eastern coast of Mexico or South America that is shipped by water to New Orleans, and thence by rail to the Pacific coast ports of the United States, and is any of such freight transhipped by water to Alaska or the Orient? If so, please state the freight rates charged from the points where it originates by water to New Orleans, and from New Orleans to the Pacific coast ports of the United States, or the places of its destination.

Answer. These two questions are practically answered by the replies to previous questions. Questions 27 and 28 dealt with in one answer:

27. What are the wharfage facilities of New Orleans?

28. What is the depth of the channel to the Gulf at low water?

Answer. The harbor of New Orleans is one of the most capacious in the world. It is accessible through the Eads jetties at the mouth of the river, where there is a safe navigable channel of 28 feet in depth of water through South Pass.

The Government is preparing to open through the delta of the river another deep-water pass, called Southwest Pass, the depth of which, within the next two years, will be increased to 35 feet, with a much greater width than South Pass.

Vessels meet with no delay whatever in entering and ascending South Pass, either by day or night.

The channel at the city is 2,000 to 3,000 feet wide. The depth ranges from 30 to 60 feet along the wharf, to as much as 280 feet in the stream. The length of the shore line from Chalmette, the lower port limit, up to Southport is about 20 miles.

There are landing places upon both banks, but chiefly on the city side.

The docks extend along the stretch of water front in one continuous line of timbered levee of more than 30,000 feet. These wharves are in charge of a dock commission, and are maintained by the payment of tonnage dues, payable by all vessels landing alongside.

The charge made for this service is as follows: Two cents per ton per day on the gross tonnage of a vessel for the first three days, and 1 cent per ton per day on the gross tonnage for the next three days, or a charge of 9 cents for the first six days. Thereafter a vessel may use the wharf for a period of thirty days free from any charges.

The public wharves are being modernized with iron sheds and other improvements, and the railroads centering here have also splendid dock and export facilities.

The port conveniences are both adequate and modern. The charges to shipping and upon commerce, as compared with those of other ports, are moderate, since the water front has passed to public control.

Many improvements, as already stated, have been made, and others have been inaugurated in line with the commercial expansion of our city.

Steps have also been taken to further increase the facilities by speedily constructing a belt railroad to receive from the railroads terminating in New Orleans their freight, and switch the same, with the least possible delay, to its ultimate destination, either on the river front or at some factory or jobbing warehouse anywhere within the city.

Our facilities for towing ships, for coaling, repairing, supplying, and inspection are complete.

Large iron works making marine business a specialty are available.

The great naval dock, which floats a 15,000-ton battle ship, is, in case of necessity, at the disposal of a merchant vessel requiring its service.

Coal in abundance comes here via the Mississippi from the great Pennsylvania fields, as well as from Alabama.

Questions 29 to 31 dealt with in one answer:

29. In answering these inquiries, it is desired that a full discussion of the subject-matter of each question be given, so that each answer will present a clear and comprehensive statement of all the facts that have a direct or indirect bearing upon the subject.

30. State any objections that the commercial interests of New Orleans may have against the present commercial policy and rate-making system of the Panama Railroad Company.

31. Please make any statement not covered by the above question that you think may have a bearing on the subject of transportation by the way of Panama.

Answer. With proper effort New Orleans should command a large share of the traffic with Latin America, as well as the Orient.

Heretofore the financial and commercial enterprises of the city have been fully occupied without branching out in new directions. With the construction of the Isthmian Canal, however, it is plain that New Orleans must ultimately have a leading part in this trade.

As the nearest of the large ports having rail and water connection to all parts of the central section of the United States, there can be but one of two results: Either the traffic of the Mississippi Valley with the Pacific coast must be done through New Orleans or the east and west railroads must make competitive rates. In either case, and from a similar cause, the country will receive the same benefit as that which inured to the western farmer when the Eads jetties were opened.

In further answer to the above questions, since you invite additional testimony, we might say that our request made to the Southern Pacific Company for information regarding certain data touched upon in your questions was refused.

Therefore the answers had to be made up as thorough as was possible under the circumstances.

While on the subject of Panama transportation, it brings to mind the experience the wholesale grocers, liquor dealers, and other interests had with the Southern Pacific Company several years ago, when the dealers here concluded that the rate from San Francisco, in car-

load lots, of 75 cents per hundred pounds was excessive, and exceedingly so. The merchants at the time took the bull by the horns and had the wine transported from San Francisco to Panama by steamship, and thence to New Orleans, at a rate of 45 cents, as against the 75-cent rate of the Southern Pacific, all rail.

While the wine was en route by this vessel the Southern Pacific reduced their rail rate to 45 cents to meet the steamship rate. After the wine reached here the Southern Pacific raised their rate again to 50 cents and finally, after the boat was withdrawn, back to 75 cents.

In the meantime, the jobbers thought the Southern Pacific would protect the recently reduced rate, but, as stated above, when the ship was withdrawn the Southern Pacific put their rate back to 75 cents on carload lots, and have not deviated from this rate ever since.

This is one of the many instances where competition would bring about better conditions. A brief résumé of facts regarding New Orleans and her commercial position shows the following:

Our city is located in the heart of the sugar, rice, and cotton section.

New Orleans is only 165 to 280 miles distant from the oil fields of Louisiana and Texas.

She is only 115 miles distant from the salt mines of Louisiana; 230 miles from the sulphur mines of Louisiana; 400 miles from the coal and iron mines and mills of Alabama, and 110 to 500 miles from the cotton mills of the southeastern States.

Among other products, New Orleans is famed for its oysters, fish, and shrimps, with canning and packing factories at its very doors.

New Orleans is within a few hours of the vast pine, cypress, and hardwood forests, with rosin, turpentine, tar, and pitch.

New Orleans is the only outlet to the great Mississippi River and its tributaries.

New Orleans has six trunk lines and twelve railroads.

New Orleans has twenty-one steamship lines plying to all parts of the world.

Thirty miles of dock facilities.

Largest floating dry dock in the world.

New Orleans has six elevators, with 5,500,000 bushels capacity.

Belt railroad under public ownership.

Low port charges.

The commerce of New Orleans, including both exports and imports, for 1904, amounted to \$182,631,619, an increase of 83.3 per cent over 1894.

New Orleans is the largest sugar, rice, and cotton market in the world, and second only to New York as a coffee market.

New Orleans imports more fruit than any other port.

Population of 325,000.

Bank clearances for 1904 of \$970,928,984.

Post-office receipts for 1904, \$687,614.43.

Customs receipts for 1904, \$8,404,824.96.

New Orleans has a navy-yard, cotton mills, wireless station, mint, etc.

Some of the leading crop outputs of Louisiana are:

Sugar, 739,000,000 pounds; rice, 500,000,000 pounds; molasses and sirup, 13,800,000 gallons; cotton, 824,000 bales; oysters, 539,013 half barrels.

Besides, there is salt, lumber, sulphur, rosin, turpentine, tar, pitch, oil, fruit, vegetables, rice, straw, hay, shrimps, and fish in large quantities produced in Louisiana.

In conclusion, permit us to state that the New Orleans Board of Trade considered it a great privilege to answer your inquiries, and should you find, upon investigation, that some points are not covered as fully as you might desire, please do not hesitate to command us further.

The merchants of New Orleans are fully alive to the situation as relating to the trade expansion with Panama and over the Isthmus with Central and South America, and strenuous efforts will be made, with the assistance of our exchange, to overcome such obstacles as up to this time have interfered with the free movement through this port.

It is needless for us to add that your good offices are heartily solicited, and will be highly appreciated in connection with our efforts.

Yours, very sincerely,

E. F. KOHNKE, *President.*
FRED MULLER, *Secretary.*

NEW ORLEANS BOARD OF TRADE (LIMITED),
New Orleans, May 22, 1905.

J. L. BRISTOW, Esq.,
Special Panama Railroad Commissioner, Washington, D. C.

DEAR SIR: Your esteemed favor of the 17th instant came duly to hand, and, agreeable to your request, I now beg to furnish you with the inclosed data relative to freight rates on some of the principal export commodities moving through New Orleans.

The rates shown on sulphur, pig iron, packing-house products, and phosphates are from the only sources of supply which are tributary to New Orleans.

The rates shown on the remaining commodities are from the principal Southern points.

The source of supply on some of these articles, however, is not confined to the points mentioned, but is largely drawn from the local territory contiguous to New Orleans. Some of those commodities are rice, molasses, and lumber, on which the various local rates apply, which are, in the main, reasonable.

If I can be of any further service to you, do not hesitate to command me.

Yours, very truly,

FRED MULLER, *Secretary.*

The following are the rates in question:

From Sulphur mines to New Orleans:		
Sulphur.....	long ton..	\$3. 00
From Birmingham to New Orleans:		
Pig iron.....	do.....	2. 50
Lumber.....	per hundredweight..	. 13
Staves.....	do.....	. 13
Cotton-seed oil.....	do.....	. 20
Bales of cotton.....	do.....	. 45
Cotton-seed meal.....	per ton..	1. 95
From Dallas and Fort Worth to New Orleans:		
Packing-house products.....	per hundredweight..	. 21
Bales of cotton.....	do.....	. 70
Tennessee points to New Orleans:		
Tennessee phosphate.....	long ton..	2. 43 to 2. 93
Louisiana points on Morgan's Louisiana and Texas Railroad to New Orleans:		
Clean rice.....	per hundredweight..	. 13 to . 25
Molasses.....	per barrel..	. 60 to 1. 25
Lumber.....	per hundredweight..	. 07½ to . 10
Cotton seed meal.....	per ton..	3. 00
Cotton-seed oil.....	per barrel..	. 70 to . 80
Memphis to New Orleans:		
Packing-house products.....	per hundredweight..	. 15
Clean rice.....	do.....	. 10
Molasses.....	do.....	. 10
Lumber.....	do.....	. 12
Staves.....	do.....	. 12
Cotton-seed meal.....	per ton..	2. 32
Cotton-seed oil.....	per hundredweight..	. 12½
Cotton.....	do.....	. 17
Vicksburg to New Orleans:		
Clean rice.....	do.....	. 10
Molasses.....	do.....	. 10
Lumber.....	do.....	. 10
Staves.....	do.....	. 10
Cotton-seed meal.....	per ton..	2. 44
Cotton.....	per hundredweight..	. 18
Meridian to New Orleans:		
Lumber.....	do.....	. 08
Staves.....	do.....	. 08
Cotton-seed meal.....	per ton..	1. 50
Cotton-seed oil.....	per hundredweight..	. 15
Cotton.....	do.....	. 36
Texarkana to New Orleans:		
Lumber.....	do.....	. 13
Cotton-seed meal.....	per ton..	3. 50
Cotton-seed oil.....	per hundredweight..	. 21½
Cotton.....	do.....	. 60
Lake Charles to New Orleans:		
Lumber.....	do.....	. 10
Cotton.....	do.....	. 30
Texas producing points to New Orleans:		
Clean rice.....	do.....	. 19 to . 22

EXHIBIT J 7.

Copy of list of questions submitted to the Chamber of Commerce of Mobile, Ala., and answers thereto.

MOBILE, ALA., April 20, 1905.

What kind of freight originates in Mobile and the vicinity within its commercial radius for export? In answering this question, define what you consider the commercial radius of Mobile.

What is the extent of the commerce between Mobile and the Pacific coast ports of the United States, Mexico, Central and South America?

Are there any impediments of any kind that prevent the full development of commerce between Mobile and the Pacific coast ports of Mexico, Central and South America? If so, please state fully what such impediments are.

What are the principal articles of freight that originate within the commercial radius of Mobile that are shipped by rail to Pacific coast ports of the United States? Estimate the amount of each of the principal articles, and state the freight rates charged by the railroads upon each article to the places of destination; that is, the rate to San Diego, Los Angeles, San Francisco, etc.

How much of this freight would it be practicable to ship by the way of Panama? If there is any part of this freight that could not be shipped by the way of Panama, state why it could not be shipped by that route.

State the principal articles that could be shipped by the Panama route, and the amount of each.

If freight has not moved by the way of Panama, please state the reasons why.

What is the time consumed in transporting freight from Mobile to San Francisco, Los Angeles, and San Diego by rail?

How much freight that originates within the commercial radius of Mobile is shipped to oriental countries?

What per cent of such freight goes by all-water routes—that is, via the Suez Canal or the Straits of Magellan—and what per cent by part rail and part water?

Give the rates charged on the principal articles by each of the above-mentioned routes. Are there any products that originate within the commercial radius of Mobile that can not be successfully exported to the western coast of the United States, Mexico, Central and South America and the Orient but which could be with improved shipping facilities by the way of Panama?

What are the principal articles of freight received at Mobile from the Orient and from the western coast of the United States, Mexico, Central and South America?

Estimate the amount of each of the principal articles of such freight.

What per cent of this freight comes by the transcontinental railroads, what per cent by all water, and what per cent by Panama?

What are the freight rates charged on the principal articles by each of these routes?

What part of this freight that does not come by the way of Panama would it be practicable to ship by that route?

What are the present shipping facilities between Mobile and Colon?

Are there any impediments that prevent the free movement of commerce between Mobile and Colon? If so, please state in detail what these impediments are.

Is it essential to the commercial interests of Mobile that there should be a line of steamers making regular schedule trips between Mobile and Colon?

Is there any American steamship line that would establish a regular service between Mobile and Colon if it were given the privilege of through bills of lading from Mobile to Pacific coast ports of the United States by way of Panama with connecting lines on the Pacific coast?

What are the wharfage facilities of Mobile?

What is the depth of the channel to the Gulf at low water?

In answering these inquiries it is desired that a full discussion of the subject-matter of each question be given so that each answer will present a clear and comprehensive statement of all the facts that have a direct or indirect bearing upon the subject.

State any objections that the commercial interests of Mobile may have against the present commercial policy and rate-making system of the Panama Railroad Company.

Please make any statement not covered by the above questions that you think may have a bearing on the subject of transportation by the way of Panama.

(Signed)

J. L. BRISTOW,
Special Panama Railroad Commissioner.

To the PRESIDENT OF THE CHAMBER OF COMMERCE.

MOBILE CHAMBER OF COMMERCE,
Mobile, Ala., May 6, 1906.

Hon. J. L. BRISTOW,
Special Panama Railroad Commissioner, Washington, D. C.

DEAR SIR: I have the honor to submit the following answers to the questions you submitted to me while on your visit to Mobile. I regret the delay in forwarding this report, but as indicated in my letter of April 27, it has been unavoidable and not of my making.

For convenience I have answered your interrogations by number.

1. The freight originating within the commercial radius of Mobile for export are cotton, cotton-seed oil, coke, and meal, cotton goods, timber of all kinds, coal, pig iron, and manufactures of iron; wheat, corn, oats, hay, flour, packing-house products, and all the products of the Mississippi Valley. Technically speaking, there is no limit to the extent of commercial radius of Mobile, so far as may relate to exportation of traffic. Mobile draws its principal supplies of food stuffs, manufactured articles, etc., from all the Northern, Western, and Central States. As to iron and coal interests of Alabama, you, of course, are in position to set out clearly Mobile's advantages over that of any other Gulf port. In attempting, however, to limit the commercial radius by description, would suggest that you take the territory lying east of the Mississippi, as far north as Memphis, then States of Arkansas, Missouri, Kansas, Nebraska, Iowa, Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio, Kentucky, Tennessee, the Carolinas, Georgia, and Alabama.

2. There is no interchange of commerce between Mobile and the Pacific coast ports of Mexico, Central and South America. From Mobile to the Pacific coast ports of the United States there is regular movement of cotton factory products, raw cotton compressed into bales destined to the Orient, generally handled by Seattle, Portland (Oreg.), and San Francisco. The major portion of cotton factory products referred to are likewise destined to the Orient. In the reverse direction—from the Pacific coast to Mobile—there is considerable volume of canned goods moving regularly, such as salmon, canned fruits, California wines and other articles indigenous to California.

3. The only impediment or obstacle preventing the full development of commerce from Mobile to Pacific coast ports of Central and South America is the lack of proper transportation facilities, and such facilities have been impossible, not only from Mobile, but from other Gulf ports on account of the great advantage New York and the Atlantic seaboard of the United States have had, by reason of the preferential workings of the Panama Railroad with the Panama Steamship Company. In other words, with the arbitraries demanded by the Panama Railroad for its rail service from Colon to Pacific coast terminal where connection is to be had with diverging water carriers, it is impossible for Gulf ports to maintain water connection and pay these charges in competition with eastern seaboard referred to.

4. This question is practically answered by information given in question 2 as to character of freight interchanged between Mobile and points within its commercial radius and the Pacific coast ports of the United States. I am not advised that San Diego or Los Angeles handle any Southern products. San Francisco is a regular receiver of imported hemp, that comes from Progreso, Mexico, by way of Mobile, and principally large quantities of cotton factory products, that move from southeastern points, iron and iron articles, such as iron pipe, etc. I will cite a few commodities and endeavor to quote rates. Cotton factory products from principal cities of the South, such as drills and domestics (usually known as cotton piece goods), from Atlanta, Augusta, and Carolinas, approximately \$1.25 per hundred pounds; from Mobile, \$1, carloads, minimum 30,000 pounds, less than carloads, \$1.50 per hundred pounds. Canned goods, in the reverse direction to Mobile proper, 75 cents per hundred pounds, carloads, minimum 40,000 pounds, and claret from San Francisco and Los Angeles to Mobile, 75 cents, with somewhat higher rates to Atlanta, Birmingham, and other points or territory contiguous to Mobile, that would be supplied by this port in event of Panama service. A large amount of dried beans and peas, evaporated and dried fruits, and green fruits come to this territory from California. The freight on these articles is from 75 cents to \$1.25 per hundred pounds in carload lots.

5. It will be entirely practical to ship by the way of Panama all the traffic mentioned in the foregoing except that which is considered of perishable nature, which route would not be practical for the handling of the latter commodities on account of longer distance and time necessary to be consumed en route.

6. All of the articles mentioned in answer to No. 1 could be marketed and shipped in large quantities to great advantage by the Panama route.

7. Freight is not moved by the way of Panama for reason as explained in answer to query 3; that is, no service or discrimination of the Panama Railroad in its charges against the Gulf in favor of the Atlantic seaboard or New York.

8. Usual time to transport freight from Mobile to California terminals, San Francisco, Los Angeles, etc., ten to twelve days; Mobile to North Pacific points, namely, Tacoma, Seattle, Portland, and Vancouver, fifteen days to twenty days.

9. Large quantities of cotton piece goods, raw cotton compressed in bales, is moved from territory contiguous to Mobile, or fairly lying within its commercial radius of Mobile, to China and Japan, principally moves by North Pacific coast ports—Seattle or Portland.

10. A very small percentage of the freight for the Orient is moved via the all-water route, that is, by the Suez Canal, on account of the transshipment necessary from some European port, longer time consumed, cost of insurance, etc., on property, and invariably this traffic is moved by rail to the North Pacific coast ports of the United States, thence by water carrier direct to oriental destination. In fact, I should estimate that 95 per cent of the traffic, at least, was routed that way against the Suez Canal route.

11. Rates on cotton factory products from principal manufacturing centers contiguous to Mobile or within its commercial radius to Japan and China common points, as Kobe, or Yokohama, Japan, or Shanghai, China, are as follows: On raw cotton, compressed in bales to the density of 22½ pounds to the cubic foot, takes rates ranging from \$1.20 to \$1.35 per hundred pounds, according to the point of origin.

12. In my judgment the handling of cotton and cotton goods to the Orient and foreign countries could be greatly increased or stimulated with improved shipping facilities by Panama. Furthermore, the products of the Pacific coast ports of Mexico, Central and South America could be stimulated and largely developed by the port of Mobile for the interior; for instance, such as nitrate of soda, which comes from Chile, coffees and woods of value that now have to be moved by water around Cape Horn, if they are moved at all. The coal, iron, and timber industries are susceptible to large development to the west coast, principally of Central and South America, and proper shipping facilities and reasonable rates are only needed to promote its successful handling.

13. Matting and a few other articles of oriental manufacture are all that is received here. From the western coast of the United States we receive the articles mentioned in answer to No. 4. From the western coast of Mexico, Central and South America nothing is now received.

14. Have not the data to answer intelligently.

15. All by transcontinental railroads.

16. See answer to No. 4.

17. See answer to No. 5.

18. The present shipping facilities between Mobile and Colon are considered equal with any port out of the Gulf. The steamship companies, of which there are several, hold themselves in readiness to put on any required number and class of steamers to take care of the business offering out of Mobile for Panama. Of course, these lines can not be established until the business is offered. In order to secure a regular service out of Mobile it is necessary for Mobile to be given equal advantages in competing for the supplies purchased, in order to develop a regular service from Mobile to Panama.

The Munson Steamship Line, which is now operating an extensive and regular service from Mobile to Cuba, is in the field for this Panama business, and has already secured two cargoes of creosoted material, which will move from Mobile to Panama.

The Atlantic and Mexican Gulf Steamship Company, which operates an efficient and regular service from Mobile to Mexico, is also prepared to handle any business from this port to Panama that may be offering.

19. The chief impediment that prevents the free movement of commerce between Mobile and Colon is simply the demand at Colon. The inauguration of service so far as may relate to Colon proper is concerned with the opening up of the Panama Railroad as a connection on reasonable rate basis, a free movement of commerce to the Pacific coast of the United States, Mexico, Central and South America, would be greatly stimulated and handled in large quantities. Any rate adjustment that might be considered or made should be in dollars and cents per 100 pounds, whether it relates to ocean or rail carrier.

20. It is very essential to the commercial interests at Mobile that there should be a regular line of steamers making regular scheduled sailings between Mobile and Colon, the reasons for which are of great importance.

21. With the opening up of the Panama Railroad and its steamer connection on the Pacific coast to the Pacific coast ports on a reasonable rate basis, adjusted with relation to the current per cents and rail rates between this territory and such Pacific coast ports, there is no doubt that sufficient exchange of traffic or opportunities for handling such offerings at Mobile and its vicinity would be made attractive to steamship interests. I am informed that there are companies which would establish an American steamship line maintaining a regular service between Mobile and Colon if they were given the privilege of through bills of lading from Mobile and interior points in connection with connecting lines to the Pacific coast ports of the United States by way of Panama and for Panama, with connecting lines on the Pacific coast.

22. The wharfage facilities of Mobile, now in use and in course of construction, are modern, up to date in equipment, and thoroughly ample for the handling of this line. Furthermore, the port charges, which might be mentioned in this connection, are cheaper than

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any other Gulf port, which with the low price of coal, less than any other South Atlantic or Gulf port south of Newport News, its unlimited supply of fresh water, and the cheapest labor in the country, 50 or 100 per cent less than New Orleans, Galveston, and other Gulf ports, places Mobile on a par with, if not above, any Gulf port.

23. Depth of the channel to Gulf is 22 feet 6 inches in low water.

24. Observed in answering the other questions.

25. See answer to question 3.

26. At the present time while Mobile does not have a purchasing agent stationed at this place, which is the case at New Orleans, we are possibly placed at a disadvantage in getting some of the business that would otherwise be handled through this port. It is to be hoped, however, that this objection will be remedied within a short time by having the commission station here a purchasing agent to cover our territory the same as has been done at New Orleans.

Mobile is the cheapest coaling port for steamers south of Newport News. This, combined with the cheap rates for stevedoring in loading and unloading of steamers and other advantages which Mobile has, as compared with competitive ports, should, if we are given the opportunity to compete for this Panama business, secure for Mobile her full share of the business.

In addition to the above, I would respectfully call your attention to the statement inclosed herewith of the export and import trade at Mobile for the years ending December 31, 1904. The exports went to nearly every port of the world, but with the exception of cotton, lumber, and timber, principally to Cuba and Central American ports, with which our trade now is very large.

Very respectfully, yours,

CHAS. H. BROWN, *President.*
By LEE F. IRWIN, *Secretary.*

Values of imports by countries, and the principal articles imported from each into the port of Mobile, Ala., during the calendar year ended December 31, 1904.

Countries.	Principal articles imported.	Values.
France.....	Wines.....	\$332
Italy.....	Wines, clays, and earth.....	208
Spain.....	Sulphur ore.....	24,226
Norway.....	Dried fish, matches, etc.....	2,231
Scotland.....	Whisky.....	206
England.....	Paints, oils, etc.....	22,702
British Honduras.....	Fruits and nuts.....	84,771
Costa Rica.....	do.....	212,660
Guatemala.....	do.....	79,601
Honduras.....	do.....	460,240
Nicaragua.....	do.....	44,694
Panama.....	do.....	425,176
Mexico.....	Sisal grass and mahogany.....	2,692,210
Cuba.....	Fruits, vegetables, iron pyrites.....	246,380
British West Indies.....	Fruits and nuts.....	10,171
Colombia.....	do.....	2,372
Brazil.....	Manganese ore.....	33,590
Germany.....	Phosphate.....	36,063
Switzerland.....	Cotton laces.....	453
Turkey.....	Nuts.....	201
Total value of imports.....		4,378,767

Col. L. T. IRWIN,
Chamber of Commerce.

MR. F. TEBBETTS, *Collector of Customs.*

Foreign exports.—The quantity and value of the principal articles exported through the port of Mobile.

The principal articles exported through the port of Mobile, Ala., during the calendar year ending December 31, 1904, were as follows:

Article.	Quantity.	Value.
Agricultural implements.....		\$27,949
Cattle.....number.....	6,585	199,429
Hogs.....do.....	1,942	21,675
Horses and mules.....do.....	680	107,966
All other animals.....		4,550
Corn.....bushels.....	494,922	303,434
Oats.....do.....	110,564	43,256
Flour.....barrels of 196 pounds.....	356,616	1,618,944
Bran.....tons of 2,240 pounds.....	3,065	54,980
All other breadstuffs.....		6,741
Medicines, patent and proprietary.....		8,743
Bituminous coal.....tons of 2,240 pounds.....	8,771	31,394
Other coal and coke.....		4,926
Cotton.....baies.....	64,896,681	7,236,526
Cotton, linters.....pounds.....	110,133	3,630
Cotton, cloth.....yards.....	5,821,600	184,968
Cotton, wearing apparel.....		57,462
Cotton waste.....pounds.....	207,460	15,982
Cotton seed.....do.....	3,531,042	38,118
Other manufactures of cotton.....		9,489
Fertilizers.....		23,361
Bags, cordage, and twine.....		4,316
Fish, dried, smoked, and cured.....		3,610
Fruits and nuts.....		4,863
Hay.....tons of 2,240 pounds.....	1,378	23,524
Iron and steel, and manufactures of.....		383,871
Sewing machines and parts of.....		20,083
Nails, cut and wire.....pounds.....	43,622	1,348
Pipes and fittings.....		56,017
Boots and shoes.....pairs.....	92,152	108,384
Other manufactures of leather.....		2,718
Rosin.....barrels of 280 pounds.....	39,495	127,140
Other naval stores.....		671
Paper and manufactures of.....		21,889
Reef products.....pounds.....	123,652	9,693
Hams.....do.....	2,602,361	222,904
Fork, salted and pickled.....do.....	3,535,131	238,983
Lard and lard compounds.....do.....	14,773,631	920,203
Other meat products.....		98,201
Dairy products (butter, cheese, milk).....		30,855
Rice.....pounds.....	2,541,793	54,795
Beer.....dozen quarts.....	84,452	129,833
Vegetables.....		22,710
Sawn timber.....1,000 superficial feet.....	98,589	1,295,901
Hewn timber.....cubic feet.....	1,207,239	238,954
Logs and other.....		32,807
Boards, deals, and planks.....1,000 superficial feet.....	134,819	2,020,177
Staves.....number.....	1,903,401	116,261
Furniture not elsewhere specified.....		52,653
Other lumber and manufactures of.....		145,817
Miscellaneous.....		338,329
Total domestic merchandise.....		16,731,067
Foreign merchandise exported.....		51,916
Total value of exports.....		16,782,983
Total exports for calendar year 1903.....		15,146,501
Increase over 1903.....		1,636,482

EXHIBIT J 8.

Copy of list of questions submitted to the Chamber of Commerce of Pensacola, Fla., letter of Mr. W. C. Jones, secretary, with inclosures from Mr. E. O. Saltmarsh, superintendent, and Mr. W. C. Compton, traffic manager of the Louisville and Nashville Railroad Company.

PENSACOLA, FLA., April 21, 1905.

What kind of freight originates in Pensacola and the vicinity within its commercial radius for export? In answering this question define what you consider the commercial radius of Pensacola.

What is the extent of the commerce between Pensacola and the Pacific coast ports of the United States, Mexico, Central and South America?

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Are there any impediments of any kind that prevent the full development of commerce between Pensacola and the Pacific coast ports of Mexico, Central and South America? If so, please state fully what such impediments are.

What are the principal articles of freight that originate within the commercial radius of Pensacola that are shipped by rail to Pacific coast ports of the United States? Estimate the amount of each of the principal articles, and state the freight rates charged by the railroads upon each article to the places of destination—that is, the rate to San Diego, Los Angeles, San Francisco, Tacoma, Seattle, etc.

How much of this freight would it be practicable to ship by the way of Panama? If there is any part of this freight that could not be shipped by the way of Panama, state why it could not be shipped by that route.

State the principal articles that could be shipped by the Panama route and the amount of each.

If freight has not moved by the way of Panama, please state the reasons why.

What is the time consumed in transporting freight from Pensacola to San Francisco, Los Angeles, San Diego, Tacoma, and Seattle by rail?

How much freight that originates within the commercial radius of Pensacola is shipped to oriental countries?

What per cent of such freight goes by all-water routes, that is, via the Suez Canal or the Straits of Magellan, and what per cent by part rail and part water?

Give the rates charged on the principal articles of each of the above-mentioned routes?

Are there any products that originate within the commercial radius of Pensacola that can not be successfully exported to the western coast of the United States, Mexico, Central and South America, and the orient, but which could be with improved shipping facilities by the way of Panama?

What are the principal articles of freight received at Pensacola from the Orient and from the western coast of the United States, Mexico, Central and South America?

Estimate the amount of each of the principal articles of such freight.

What per cent of this freight comes by the transcontinental railroads, what per cent by all water, and what per cent by Panama?

What are the freight rates charged on the principal articles by each of these routes?

What part of this freight that does not come by the way of Panama would it be practicable to ship by that route?

What are the present shipping facilities between Pensacola and Colon?

Are there any impediments that prevent the free movement of commerce between Pensacola and Colon? If so, please state in detail what these impediments are.

Is it essential to the commercial interests of Pensacola that there should be a line of steamers making regular schedule trips between Pensacola and Colon?

Is there any American steamship line that would establish a regular service between Pensacola and Colon if it were given the privilege of through bills of lading from Pensacola to Pacific coast ports of the United States by way of Panama with connecting lines on the Pacific coast?

What are the wharfage facilities of Pensacola?

What is the depth of the channel to the Gulf at low water?

In answering these inquiries it is desired that a full discussion of the subject-matter of each question be given so that each answer will present a clear and comprehensive statement of all the facts that have a direct or indirect bearing upon the subject.

State any objections that the commercial interests of Pensacola may have against the present commercial policy and rate-making system of the Panama Railroad Company.

Please make any statement not covered by the above questions that you think may have a bearing on the subject of transportation by the way of Panama.

(Signed)

J. L. BRISTOW.

Special Panama Railroad Commissioner.

To the PRESIDENT OF THE CHAMBER OF COMMERCE.

CHAMBER OF COMMERCE OF PENSACOLA.

Pensacola, May 25, 1905.

Hon. JOSEPH L. BRISTOW,
Washington, D. C.

DEAR SIR: Referring to your inquiry of April 21, ultimo, inquiring as to facilities obtaining at Pensacola to handle supplies destined for Panama, etc., I beg to inclose herewith letters from Mr. E. O. Saltmarsh, superintendent of the Louisville and Nashville Railroad Company, at Pensacola, and Mr. C. B. Compton, traffic manager of the Louisville and Nashville Railroad Company, Louisville, Ky.

If there is any further information which we can give you, please command me, and oblige,
Very truly, yours,

W. C. JONES, *Secretary.*

LOUISVILLE AND NASHVILLE RAILROAD COMPANY,
PENSACOLA DIVISION, OFFICE OF THE SUPERINTENDENT,
Pensacola, Fla., May 25, 1905.

Hon. J. E. STILLMAN,
Pensacola, Fla.

DEAR SIR: Referring to inquiries made by Mr. Bristow on his visit to Pensacola, and information desired from the traffic department of this company in regard to same.

I inclose letter which I have just received from the traffic manager replying fully in regard to the matter. Please note that Mr. Compton states it is his understanding that you would, in connection with his reply, prepare and submit to Mr. Bristow such further information as called for by him. I presume that you will do this.

Yours, truly,

E. O. SALTMARSH, *Superintendent.*

LOUISVILLE AND NASHVILLE RAILROAD COMPANY,
OFFICE OF THE TRAFFIC MANAGER,
Louisville, Ky., May 22, 1905.

Mr. E. O. SALTMARSH,
Superintendent, Pensacola, Fla.

DEAR SIR: You will recall when Mr. Bristow, special Panama Railroad Commissioner, was in Pensacola a short time ago he gave Mr. Stillman a memorandum of the information he desired concerning the facilities at Pensacola, the export traffic handled through that port, and the practicability of forwarding via that route traffic for Panama, also traffic for the Orient, etc., in connection with the Panama Railroad.

I return the memorandum herewith, and in answer to the inquiries concerning traffic, etc., desire to submit the following:

The inquiries involve consideration of what might be called four distinct territories, as indicated below, and information is asked:

A. As to the commercial radius of Pensacola with respect to these territories, or, in other words, to what extent competition via the present routes can be met via Pensacola.

B. What the traffic consists of.

C. The quantity.

D. The present routes.

E. The rates charged on principal articles.

F. Existing facilities from Pensacola.

ORIENTAL TERRITORY.

A. The commercial radius of Pensacola, in view of existing competition, could hardly be reckoned as including any points on or north of the Ohio River, though all southern territory east of the Mississippi River could possibly be worked via Pensacola without much interference from the Pacific coast or New York lines.

B. The traffic from the territory just described is composed chiefly of cotton and cotton piece goods.

C. The movement of cotton to Japan this year greatly exceeded that of any previous year. For instance, during the seven months ending March 31, 1905, there were shipped 171,146 bales, as against 39,467 bales during the same period of last year. We are not advised how many bales moved from the territory east of the Mississippi River, nor can we say what quantity of cotton piece goods moved from this territory.

D. Cotton and cotton piece goods from this territory moves via the following routes: (1) Via the Pacific coast; (2) via the Gulf, South Atlantic, and Virginia ports direct, also via Liverpool.

Cotton mostly moves via New York and Suez ports, cotton piece goods via Virginia ports, also via New York and Suez.

E. The rate on cotton during the past season has been \$1.21, cotton piece goods about \$1.18 per hundred pounds.

There does not seem to be much encouragement for the establishment of a line between Pensacola and Panama, for as far as business to or from the Orient is concerned. The only nucleus for such service would be cotton and cotton piece goods, and the former

would occupy too much room under hand stowage to find any profit in the through rate accorded via the Pacific coast, especially since from that figure it is likely an allowance would have to be made to cover lost weight resulting from additional handling at Colon and Panama and port of transshipment.

If a steamship line was established from Panama to Japanese and Chinese ports, the project would look more feasible, provided capable cotton screwmen were maintained at Panama.

COLON.

A. We are to-day competing with the New York line for all business as far east as the Buffalo-Pittsburg zone, and I would therefore consider Pensacola's commercial radius, so far as cotton is concerned, as being all territory west of the Buffalo-Pittsburg zone, including, of course, all southern territory.

B. The traffic consists largely of machinery and supplies for the Isthmian Canal Commission.

C. We have no information relative to the total movement.

D. Shipments are at present handled in connection with the United States Fruit Company's steamers from New Orleans, and their time from that port to Colon, according to our information, is about six days.

E. On the principal articles consigned to the Canal Commission the rate from New Orleans is 22½ cents per hundred pounds; for other consignees in the Republic of Panama the rate is about 25 cents per hundred pounds.

F. There are no transportation facilities from Pensacola at present.

PANAMA AND PORTS ALONG THE WEST COAST OF CENTRAL AND SOUTH AMERICA, ETC.

A. The commercial radius of Pensacola, so far as these ports are concerned, is all territory west of the Buffalo-Pittsburg zone and all southern territory.

B. As the movement of traffic has heretofore been entirely via New York, we have no information as to what it consists of.

C. We are not advised of the volume of this traffic.

D. The time occupied in sailing from New York to Colon, according to our information, is about eight days.

E. We are not advised as to the rates charged.

F. There are no transportation facilities from Pensacola at present.

This business, particularly for Mexican and South American ports, is conducted exclusively through New York brokers, though considerable of the traffic originates in western territory. If a line were established from Pensacola, we would have to interest parties in shipping direct from factories, instead of via New York, the same as was done with the Cuban traffic. Pensacola should seemingly enjoy quite a share of the movement of pine lumber for these ports. The competition would be timber from the Pacific coast.

CALIFORNIA TERMINALS, SAN FRANCISCO, LOS ANGELES, ETC.

The commercial radius of Pensacola, or the territory from and to which competition could possibly be met via that port, is probably that lying between the Buffalo-Pittsburg zone and the Mississippi River traffic from Ohio River points and territory south thereof, especially the latter, comes unquestionably within her commercial radius.

B. The character of traffic forwarded to and from territory north of the Ohio River is of a variable nature, but from Ohio River points and points south thereof, from which Pensacola should enjoy a more advantageous position, the traffic consists principally of whisky, cotton piece goods, iron pipe, canned fish, cigars, and phosphate rock. That shipped into this territory consists of canned goods, dried fruits, nuts, etc.

C. We have no statistics showing the volume of traffic to and from the territories named.

D. The routes are via the transcontinental lines and via the Mississippi River gateways, principally New Orleans and St. Louis.

E. The present rates from southern territory on the articles above described are: Cotton piece goods, from southeastern points, \$1.35 per hundred pounds; iron pipe, from Birmingham and Anniston districts, \$15 per ton; pig iron, from Birmingham district, \$12.70 per ton; canned fish, from Biloxi, Miss., etc., \$1 per hundred pounds; cigars, from Key West, \$1.81 per hundred pounds; phosphate rock, from Mount Pleasant, Tenn., \$15.19 per ton.

I shall be glad if you will convey the above information to Mr. Stillman. It was the understanding, I believe, that he would prepare such other information as is called for in the memorandum and submit all the data to Mr. Bristow.

Yours, truly,

C. B. COMPTON,
Traffic Manager.

EXHIBIT J 9.

Copy of list of questions submitted to the Chamber of Commerce of Galveston, Tex., and letters of Mr. C. R. Fitchell, secretary, in response thereto.

GALVESTON, TEX., April 24, 1905.

What kind of freight originates in Galveston and the vicinity within its commercial radius for export? In answering this question define what you consider the commercial radius of Galveston.

What is the extent of the commerce between Galveston and the Pacific coast ports of the United States, Mexico, Central and South America?

By what routes does this commerce go, that is, what per cent by rail to the Pacific coast ports of the United States, what per cent by the Isthmus of Panama, and what per cent by the Straits of Magellan?

Are there any impediments of any kind that prevent the full development of commerce between Galveston and the Pacific coast ports of Mexico, Central and South America? If so, please state fully what such impediments are.

What are the principal articles of freight that originate within the commercial radius of Galveston that are shipped by rail to Pacific coast ports of the United States? Estimate the amount of each of the principal articles, and state the freight rates charged by the railroads upon each article to the places of destination, that is, the rate to San Diego, Los Angeles, San Francisco, etc.

How much of this freight would it be practicable to ship by the way of Panama? If there is any part of this freight that could not be shipped by the way of Panama, state why it could not be shipped by that route.

State the principal articles that could be shipped by the Panama route and the amount of each.

If freight has not moved by the way of Panama, please state the reasons why.

What is the time consumed in transporting freight from New Orleans to San Francisco, Los Angeles, and San Diego by rail?

How much freight that originates within the commercial radius of Galveston is shipped to oriental countries?

What per cent of such freight goes by all-water routes, that is, via the Suez Canal or the Straits of Magellan, and what per cent by part rail and part water?

Give the rates charged on the principal articles by each of the above-mentioned route.

Are there any products that originate within the commercial radius of Galveston that cannot be successfully exported to the western coast of the United States, Mexico, Central and South America, and the Orient but which could be with improved shipping facilities by the way of Panama?

What are the principal articles of freight received at Galveston from the Orient and from the western coast of the United States, Mexico, and Central and South America?

Estimate the amount of each of the principal articles of such freight.

What per cent of this freight comes by the transcontinental railroads, what per cent by all water, and what per cent by Panama?

What are the freight rates charged on the principal articles by each of these routes?

What part of this freight that does not come by the way of Panama would it be practicable to ship by that route?

What are the present shipping facilities between Galveston and Colon?

Are there any impediments that prevent the free movement of commerce between Galveston and Colon? If so, please state in detail what these impediments are.

Is it essential to the commercial interests of Galveston that there should be a line of steamers making regular schedule trips between Galveston and Colon?

Is there any American steamship line that would establish a regular service between Galveston and Colon if it were given the privilege of through bills of lading from Galveston to Pacific coast ports of the United States by the way of Panama with connecting lines on the Pacific coast?

What amount of freight is transported across the continent from the Pacific coast by rail to Galveston and then reshipped by water to New York and Atlantic coast ports of the United States?

Is there any freight originating outside of the United States that is shipped by water to any of the Pacific coast ports of the United States, thence by rail to Galveston, thence by water to Europe, the eastern coast of the United States, Mexico, or South America? If so, please state the character of this freight, the amount, the places where it originates, and the rates charged by the railroads for its transportation across the continent, and the rates by water to its destination.

Is there any freight originating on the eastern coast of the United States, in Europe, or on the eastern coast of Mexico or South America that is shipped by water to Galveston and

thence by rail to the Pacific coast ports of the United States; and is any of such freight transhipped by water to Alaska or the Orient? If so, please state the freight rates charged from the points where it originates by water to Galveston and from Galveston to the Pacific coast ports of the United States or the places of its destination.

What are the wharfage facilities of Galveston, and who own and control the wharves?

What are the port charges of Galveston?

What is the depth of the channel to the Gulf at low water?

In answering these inquiries it is desired that a full discussion of the subject-matter of each question be given, so that each answer will present a clear and comprehensive statement of all the facts that have a direct or indirect bearing upon the subject.

State any objections that the commercial interests of Galveston may have against the present commercial policy and rate-making system of the Panama Railroad Company.

Please make any statement not covered by the above questions that you think may have a bearing upon the subject of transportation by the way of Panama.

(Signed)

J. L. BRISTOW,
Special Panama Railroad Commissioner.

To the PRESIDENT OF THE CHAMBER OF COMMERCE.

GALVESTON CHAMBER OF COMMERCE.
Galveston, Tex., May 15, 1905.

Hon. J. L. BRISTOW,

Special Panama Railroad Commissioner, Washington, D. C.

DEAR SIR: Referring to your favor of the 10th instant and to the list of questions regarding commerce of Galveston, which you left with us on the occasion of your recent visit to this port, we beg leave to offer the following replies to your inquiries from our standpoint, based not so much on present business but instead on commerce which is naturally due to this port and which we believe will materialize under favorable and equal conditions.

KIND OF FREIGHT WITHIN GALVESTON'S COMMERCIAL RADIUS FOR EX-

Freight originating within the commercial radius of Galveston includes lumber and dimension stuff of all kinds, staves, bundles, coal, crude and refined oil, flour, bran and mill stuffs, wheat, corn, oats and other grains, hay, broom corn, horses, cattle, hogs, sheep, poultry, eggs, butter, cheese, packing-house products, lard and lard products, salt, cotton, sugar, rice, tobacco, cement, brick, lime, machinery, agricultural implements, structural iron, railway equipment and supplies, glass, sewer pipe, powder and high explosives, fruits and vegetables of all kinds, cotton goods and dry goods, domestic utensils, furniture of all sorts, groceries, canned meats, fish, fruits, vegetables, hardware, iron, nails, wire, drugs, and chemicals. The commercial radius of Galveston extends to a limit surrounding the territory on and west of the Mississippi River, including Chicago. Therein are the vast natural fields of mineral wealth, coal, lumber, oil—the country bearing the grains, fruits, vegetables, cotton, live stock. In such area also are the prosperous, growing commercial centers containing manufactories of all descriptions. Such is the country that is now shipping to, from, and through Galveston. This commercial territory tributary to this port extends to and even beyond the Rockies and into Mexico. Recently over 67 per cent of the exports of the United States were agricultural products, of which 65 per cent originated west of the Mississippi River. The center of the country is nearly 50 per cent closer to tide water via Galveston than via New York—that is, half of the territory of the United States is nearer Galveston than any other port east thereof. Chicago may well be said to be the center of a large manufacturing district which is practically the same distance from Galveston as from New York. Galveston is 500 miles nearer Colon than New York is. Factories are gradually coming west and south into the midst of natural resources. Galveston is reached by several of the largest railway systems in the United States. Galveston is the only eastern ocean port of the Santa Fe system with over 9,000 miles of track ramifying the very best parts of the country and reaching the prosperous cities of the North and West. This also is the terminus of the International and Great Northern Railroad, the Texas part of the Gould system, which provides an outlet this way as a near, practical, and accessible port for about 9,000 miles of railway of that system west of the Mississippi River. This is the only tide-water terminus of the Missouri, Kansas and Texas system, having 3,000 miles. Galveston is the principal freight Gulf port terminus of the Southern Pacific system, with about 3,000 miles of road in Texas. This is the best Gulf outlet for Kansas City Southern—G. & I. route—with 900 miles of track. The Rock Island system has large terminal property at this port. Both the Rock Island and Frisco systems will soon enter here, according to projected plans, thus opening up for direct through shipments to this port something over 13,000 miles of railwa

EXTENT OF COMMERCE BETWEEN GALVESTON AND PACIFIC COAST PORTS OF THE UNITED STATES, MEXICO, CENTRAL AND SOUTH AMERICA, ROUTING AND DEVELOPMENT.

There is extensive tonnage between Galveston and the Pacific coast ports of the United States for transshipment by water service to the Atlantic seaboard, but we apprehend that such commerce is outside of the matter under consideration because of the impracticability of handling such commerce by way of Panama and this port. Such freight is at present transported by rail between Galveston and the Pacific coast ports of the United States. The extent of commerce between commercial radius of Galveston and Mexico, Central and South America is small because of the absence of ocean transportation, but we submit that this question of the amount of commerce this way with the ports of Mexico, Central and South America is not of so much importance as a present one, but more so with respect to the future, and we see no reasons why this port should not carry on a full share of the existing commerce between this country and the western coasts of Mexico, Central and South America with due and equal transportation facilities. No impediments exist that we know of or can discern which will prevent the full development of commerce with Pacific coast ports of Mexico, Central and South America through Galveston. The statistics of the Department of Commerce and Labor show the volume and value of such present trade and traffic. The source of similar commerce unquestionably exists within Galveston's commercial radius and I would, we believe, find ready and accessible exit and entrance through this port under favorable and equal circumstances which would permit and warrant competition.

FREIGHT BETWEEN COMMERCIAL RADIUS OF GALVESTON AND PACIFIC COAST PORTS OF THE UNITED STATES.

We understand that your next series of questions concerning the movement of freight between the commercial radius of Galveston and Pacific coast ports of the United States to comprehend domestic commerce, and we would answer accordingly. The number and variety of commodities in such commerce are too numerous to mention, and in the absence of statistics of which we are not in possession and could not readily secure, we shall not attempt to name any special class of freights, and, therefore, in not doing so we shall not attempt to specify freight rates at present charged by the railroads for all-rail service. One point we would make right here is that railroad freight rates between Galveston and Pacific coast ports are lower than or the same as the Mississippi River basis. For inspection, we would refer specifically to Transcontinental Freight Bureau Tariffs of the several railroads, westbound, I. C. C. No. 375; eastbound, I. C. C. No. 318, of which issues we have no extra copies, but they are on file with the Interstate Commerce Commission in Washington. No statistics or information are available to us showing the volume of this present rail traffic. As to the practicability of moving this freight by the way of Panama, would say that there are no impediments in the way through this port. The same conditions in this matter would exist through Galveston as through any other Gulf or Atlantic port. The character of the commodity would have to be considered. Location so far as point of origin and final destination are concerned would naturally affect the situation surrounding the handling of all transcontinental freight through any port by the way of Panama. The cost of transportation and the rates chargeable are important factors. Railways from all sections will, no doubt, stand ready to actively meet Panama Railroad competition so far as they can profitably go. The available rate through any port via Panama would be largely influenced by the cost of transportation to and from the port. In discussing this matter frankly, we would question whether there are any commodities that are produced right at tide water on the Pacific coast which are consumed right at tide water on the Atlantic coast south of Philadelphia or on the Gulf coast or vice versa that would amount to enough to be considered. It might also be questioned whether the handling of any transcontinental business is practical by way of Panama to or from ports south of Philadelphia. But if the answer is in the affirmative, we believe it should and will include the port of Galveston as well as any other. The number of handlings via Panama of course are the same to or through any port. Transcontinental freight has not moved through Galveston by the way of Panama because no water service through the Gulf has been in existence. Otherwise we see no reason why the movement of freight between Pacific coast ports of the United States and this territory could not be moved via Panama. The time consumed by rail from Mississippi River territory and Galveston to San Francisco, Los Angeles, and San Diego is approximately seven days.

FREIGHT BETWEEN COMMERCIAL RADIUS OF GALVESTON AND ORIENTAL COUNTRIES, ROUTING RATES CHARGEABLE, AND VOLUME OF BUSINESS.

The next series of questions we understand comprehend the matter of movement of export and import commerce between Galveston and the territory tributary hereto and the Orient, and here again we would submit for due consideration replies based not on present

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commerce, which is not being carried on through Gulf ports through the lack of steamship service, but would reply, having in mind the unquestionable fact that such commerce can be, should be, and will, no doubt, be extensively developed and carried on through Gulf ports and Panama via such shorter and direct routes should the necessary transportation facilities be provided. As to the amount of such freight, we would refer to the full and complete statistics compiled by the Departments of Commerce and Labor and of Agriculture. These statistics are prepared in most elaborate forms and in better ways than we could re-form them for you, and we also believe that as they are published by the said Departments they are more preferable to you than in any other way that we could get them up. We would state, however, that a large percentage of such commerce originates and is consumed in territory tributary to this port, and we believe and submit that such fact and condition should not be overlooked in considering and providing for the full and free development of transportation through the various ports of the United States and the Panama Canal. We can offer no reply to show the present routing of such oriental commerce other than it is our understanding that a very considerable portion of it moves by rail through Pacific coast ports of the United States. In answer to the question as to rates charged, would refer to Transcontinental Freight Bureau Import and Export Tariffs between oriental countries and overland common points in the United States, Nos. S. R. 617 and 650, copies of which you no doubt have at hand. There are a great many of these rates, and we believe they are more readily accessible for you as information in their printed tariff form than they would be if we recopied them for you here. In our belief there are no commodities originating within the commercial radius of Galveston that could not be successfully exported this way to the western coast of the United States, Mexico, Central and South America, and the Orient with improved and equal shipping facilities by the way of Panama. We believe that it would be practicable to ship any and every part of such oriental and Pacific Ocean commerce by way of the shorter and more direct route between Panama and this port.

SHIPPING FACILITIES BETWEEN GALVESTON AND COLON.

Following the questions in form, we state that there are no present shipping facilities between Galveston and Colon. There are no impediments of any kind that would prevent the free movement of commerce between Galveston and Colon. We feel that it is very essential to the commercial interests of Galveston and of vital importance in the due and proper maintenance of this great port that there should be a line of steamers making regular schedule trips between Galveston and Colon. We do not know of any steamship line that could establish regular service if given the privilege of through bills of lading, as suggested from Galveston to Pacific coast ports of the United States by way of Panama, with connecting lines on the Pacific coast.

FREIGHT ACROSS CONTINENT FROM PACIFIC COAST BY RAIL TO GALVESTON, THENCE WATER TO NEW YORK AND ATLANTIC COAST PORTS OF THE UNITED STATES.

We have no comprehensive figures or statistics at hand, and have not been able to secure the complete compilation of the same. It is our understanding that such tonnage is very heavy. For example, we are advised the movement during the last fiscal year from San Francisco to New York, via Galveston, of Hawaiian sugar was 127,004 tons; of California canned goods, 56,389 cases; of wine, 12,137 packages; of hops, 24,113 bales. There is a considerable quantity of foreign commerce moved by way of Pacific coast ports of the United States and Galveston over the Pacific Ocean on the one hand and the Atlantic on the other, or vice versa, but our information is in such form as not to enable us to know or state at the present time the kind and volume of such commerce.

WHARFAGE FACILITIES OF GALVESTON.

The wharfage facilities of Galveston are substantial and first-class in every particular. Galveston has the most extensive and best improved wharves on the Gulf. Practically all the piers have covered warehouses. Length of improved wharf front at the present time is 5.2 miles. Length of railroad trackage on the wharves, 35 miles. Number of cars which have been handled in one day, emptied of their freight and set out of the way, 500. Number of carloads that can be handled in one day with present force and facilities, 1,000. Warehouse space at the docks, not including the Southern Pacific docks, is 1,514,289 feet, or 36½ acres. The foregoing are the wharves owned by the Galveston Wharf Company. The Southern Pacific Company has in Galveston a dock, pier, and warehouse larger than anywhere else in the country. The Santa Fe System has large unimproved wharf property, as also has the Rock Island System. The depth of water across the outer bar to the Gulf is 28 feet. The channel and harbor and wharves have from 30 to 35 feet. We can state without boasting or fear of contradiction that the harbor facilities at Galveston are superior

to those of all other Gulf ports, and superior to most of the Atlantic ports. The wharves are nearer to the high sea than any of the other ports. There is no river or bay navigation; there is no consequent time lost or incidental risk and detention. The quarantine rules are, under agreement, equal to those at other southern ports. Ships can go in or out at day or at night.

PORT CHARGES AT GALVESTON.

The port charges at Galveston are on an exceedingly reasonable basis, and it may be said, without contradiction, that they are generally lower here than at any other port in the country. The only pilotage is that into and out of the harbor, amounting to \$3.50, or to a maximum of \$4 per foot. This would mean, for illustration, on a steamship drawing 18 feet, in, \$72; 26 feet, out, \$104. Quarantine fees, \$50 to \$75 per steamer. A steamship pays \$100 for berth. There are uniform terminal charges over all of the docks and piers at the port of Galveston. This cargo wharfage is handled in different ways, either equalized by transportation lines or attached to the freight rate, as conditions may require and warrant. These terminal charges for the very superior dock, pier, and warehouse facilities afforded here are most reasonable. They range from one-half cent to 2½ cents per 100 pounds, grading up on high-class freight. These charges are in cents per 100 pounds, or per package, or per ton, or measurement, depending upon the kind of freight. The piers, docks, and covered wharves which you saw here were erected at large expense, and they are maintained in the best condition at all times. The wharves at Galveston are readily accessible without crossing bridges or using barge transfers. They are most conveniently located. The wharf charges operate in compensation for the most excellent facilities which are provided for the placing, transfer, handling, and storage of all freight. There are unlimited track facilities directly to and along all the piers and docks. The covered warehouses afford complete protection of commodities from the weather, and they give most complete fire protection. There are no other wharfage or cargo expenses, except the usual custom-house charges. Day labor is from 30 to 40 cents per hour.

FURTHER DISCUSSION.

The questions you have asked might, in general, be subdivided as follows:

1. What trade will Galveston territory furnish to a steamship service between this port and Colon during canal construction period?

2. What trade will develop after the canal is finished?

3. Why should the Government establish a steamship at this port?

1. The trade that can, and which we firmly believe will, develop during the construction of the canal is that covering the enormous quantities and varieties of construction materials; also the large volume of supplies which will be needed in sustaining both the construction and the labor incident thereto. All such trade and traffic is tributary to this port, and this business, no doubt, can and would be developed, built up and increased through the channel of competition opened up by the establishment of a steamship line at Galveston.

2. The possibilities of trade to be developed through this port after the canal is finished are unlimited, and we believe that it is unnecessary to the subject in hand to comment at length on them in this letter.

3. We believe that Galveston should have steamship service, because tributary to this port is the territory which contains and produces commodities of commerce which can and will furnish supplies, and which offers a wide market for the disposition of imports. Further, because of the extensive and reliable railway transportation reaching this port over the shortest distance and in the most direct way. Again, because of the fine, accessible harbor existing here, with its first-class and abundant facilities for commerce. The Government most wisely developed this port, and is continuing to do so, and to maintain it in all respects. Compared with other southern ports, it can be said, without overstatement, that this is the best port, and Galveston is correspondingly able to handle Panama Canal commerce. So far this port has not handled such business, because there has been no steamer service, and private steamer service can hardly be established so long as the Government runs a steamer line from any other port in competition. If the Government changes the present system, and runs steamers from other ports to Colon than from New York, then this port should have the utmost consideration, for the following reasons:

Galveston is the only southern port west of the Mississippi River which opens tidewater transportation to a larger natural territory than any other port in the United States. This port furnishes the water-rate basis for products and commodities of commerce originating in the territory between the Mississippi River and the Rockies. The people in said territory furnish now a very large share of the Government funds which are paying canal expenses, and which will provide for the creation of that waterway. They have sustained, and are continuing to sustain, their due share of Government expenses, such as for Cuban war,

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Philippine government expenses, and each and every other Government expenditure, without so far receiving Government trade in return. Galveston territory is entitled to Government steamship service, if any is established, and requests it in return, in a measure, for its share of Government funds necessary for the canal. This port, being so readily accessible to all territory west of the line from Chicago to New Orleans, will in all likelihood offer a competitive rate basis to strengthen competition and produce cheaper supplies than heretofore from eastern territory. A steamship service from this port to Colon will give tributary territory an opportunity to furnish such materials, commodities, and supplies as are produced within its confines.

We are ready, and earnestly desire, to, according to your wishes and suggestions, enter into further discussion of this matter, which is of so much concern, not alone to this port and the various public interests centered here, but also to the highly important, prosperous parts of the United States which are and should be served by this gateway. We shall be glad to furnish or prepare any additional arguments, statistics, or information of whatsoever nature and in whatsoever form as is possible for us to supply, and we offer you our hearty cooperation.

Very respectfully,

C. R. KITCHELL, *Secretary.*

GALVESTON CHAMBER OF COMMERCE,
Galveston, Tex., June 23, 1905.

COMMERCE OF GALVESTON.

Hon. J. L. BRISTOW.

MY DEAR SIR: Referring to our conversation when I called on you in Washington last month, and to our letter of the 15th ultimo, beg leave to say that I did not return direct to Galveston, but came home by Chicago, stopping on the way, and hence some delay in following out your additional line of inquiry.

I attach a brief comparison of freight rates on some of the products of Texas.

You spoke of the low rate against river transportation, on cotton from Memphis to New Orleans, the rate from Dallas to Galveston being so much higher. In such case the powerful water factor simply affects the value on the cotton in commerce.

Records of this office do not show a classified description in detail of the coastwise traffic through this port, and it is not practicable for me to secure and prepare the same in proper time. You have been furnished with comprehensive statistics of foreign commerce to, from, and through Galveston.

COASTWISE TRAFFIC.

An extensive list of commodities and all kinds of merchandise comprise the coastwise trade through this port, such as china, crockery, earthenware, hardware, cigars, tobacco, wine, machinery, ammunition, cotton, petroleum, eggs, fibers, wool, sugar, rice, canned goods, dry goods, spelter, copper matte, dried fruit, lumber, hides, flour, etc. The total value of coastwise goods received and forwarded here was \$447,516,106 during last calendar year 1904.

LAST SIX YEARS COMPARED.

Year.	Entered.		Cleared.	
	No. vessels.	Tons.	No. vessels.	Tons.
1899.....	244	342,066	228	334,378
1900.....	182	278,831	209	295,065
1901.....	280	490,465	214	358,804
1902.....	313	705,502	267	504,844
1903.....	472	1,083,100	385	798,279
1904.....	421	1,012,840	354	803,208

The area for this coastwise traffic is Texas, Louisiana, Arkansas, Oklahoma and Indian Territories, Missouri, Iowa, and the States of the Missouri Valley west through the mountain States to the Pacific coast. I attach a tabulation of some figures. Please notice the record of coastwise business handled over the Galveston Wharf Company's property for the fiscal year ending November 30, 1904.

Outward: Total ships, 112; pounds, 306,602,032. This does not include the Morgan Line Southern Pacific business, which was again as much, and more.

Inward: Similar record, not including Morgan Line; merchandise, in pounds, 331,154,958. Total, 637,756,990 pounds.

Double this, and more, to include Morgan Line business.

We earnestly hope that this information will add to the importance of the showing we have made with respect to commerce of the extensive, influential, and productive part of the United States nearest eastern tidewater at this port.

A late report sets forth that a firm in the coast country here in Texas has secured an order from the Panama Commission for 3,000,000 bricks. Such shipment could be made much cheaper and quicker through Galveston. Numerous inquiries are being made from various directions about transportation and rates on considerable varieties and quantities of freight for Colon, showing that the public is looking toward this port in connection with Isthmian commerce, which justifies the firm belief that, under favorable and at least equal conditions, canal traffic will quickly seek and find this natural gateway, and will largely develop, to the benefit of the people of the country.

Federal appropriations for making and maintaining a deep-sea channel and harbor at Galveston are returned many, many fold to the people in the saving in cost of transportation of their tide-water commerce, both foreign and domestic, and we are positively certain that the opening of ocean transportation by the Government between this port and the Isthmus will produce like results.

Respectfully and faithfully, yours,

C. R. KITCHELL, *Secretary.*

Car-load rates, in cents, per 100 pounds, on products named below, to Galveston.

Articles.	Maximum rates, grading down as distance decreases to points.	Rates from Texas points to California terminals.
Bran.....	\$0.15	\$0.55
Cotton.....	.55	1.10
Corn.....	.12½	.55
Eggs.....	.49	2.00
Flour.....	.17½	.65
Lard.....	.42	1.25
Packing-house products.....	.42	1.40
Oil, crude.....	.10½	.75
Oil, refined.....	.28	.75
Lumber.....	.08½	.85
Wheat.....	.15	.65

EXHIBIT J 10.

Copy of list of questions submitted to the Chamber of Commerce of Seattle, Wash. No response.

SEATTLE, WASH., March 30, 1905.

What kind of freight originates in Seattle and vicinity within its commercial radius for shipment to the eastern part of the United States and Europe?

Estimate the amount of each of the principal articles of such freight.

What part of this freight could be successfully transported by the way of Panama?

Are there any articles of such freight that it would not be practicable to ship by the way of Panama? If so, please name the articles and the reason why shipment by the Panama route would be impracticable.

What per cent of the freight that could be successfully shipped by the way of Panama is transported by that route, what part by the Straits of Magellan, and what part by the transcontinental railroads? In answering the above questions please state, if practicable, the per cent of each article that is shipped by the way of the various routes.

Please state in detail why any part of the freight that it is practicable to ship by the way of Panama is not shipped by that route.

What are the principal articles of freight shipped from Seattle to points east of the Alleghany Mountains?

Estimate the amount of each article.

What are the freight rates charged by the railroads on each article?

What is the time consumed in transporting freight by rail from Seattle to the large Eastern cities, namely, Boston, New York, Philadelphia, and Baltimore?

What are the principal articles of freight that are shipped from Seattle to the Mississippi Valley?

Estimate the amount of each of the principal articles of such freight.

What are the freight rates charged on each of the principal articles of such freight?

What is the average time consumed in shipping by rail to points in the Mississippi Valley?

Is any freight shipped from Seattle to the Mississippi Valley by the way of Panama or the Straits of Magellan? If so, please state the kind of freight, the amount, and the rates charged.

What are the principal articles of freight received at Seattle from Europe, the eastern part of the United States and the Mississippi Valley?

Estimate the amount of each of the principal articles of such freight.

What per cent of this freight comes by the way of Panama, the Straits of Magellan, and the transcontinental railroads?

What are the freight rates charged on the principal articles by each of these routes?

What part of this freight that does not come by the way of Panama would it be practicable to ship by that route?

If a large part of the freight that could be shipped by the way of Panama is shipped by the other routes please state the reasons why such shipment is made by other routes.

Is it essential to the commercial interests of Seattle that there should be a line of steamers making regular schedule trips between Panama and Seattle?

What American steamship companies doing business on the Pacific coast have vessels that would be equipped for handling efficiently cargo and passengers between the Pacific ports of the United States and Panama?

Is there any American Steamship line that would establish a regular service between Panama and the Pacific coast of the United States if it were given the same privilege as to through bills of lading now held by the Pacific Mail Steamship Company with the Panama Railroad Company? If so, please state the line.

Under normal conditions, with rates fixed upon a basis of reasonable compensation for services rendered, would there be sufficient business between the Pacific and Atlantic ports of the United States to warrant the establishment of a first-class line of steamers to make regular schedule trips weekly from Pacific coast ports to Panama? Please answer this question in detail, giving the conditions under which, in your judgment, such line would or would not be successful.

Is there any freight originating elsewhere than at Seattle and brought here by steamship companies that is transported to the eastern coast of the United States from Seattle by rail? If so, please state the character of this freight, the amount, where it originates, and the rates charged by the railroad companies for its transportation across the continent.

Is any freight of this character, after it is shipped across the continent, reshipped from the eastern ports of the United States to Europe?

Is there now or has there been in the recent past any freight shipped to Seattle from the eastern coast of the United States via Europe? If so, please state why such shipments were made by that route.

In answering these inquiries it is desired that a full discussion of the subject-matter of each question be given, so that each answer will present a clear and comprehensive statement of all of the facts that have a direct or indirect bearing on the subject.

State any objections that the commercial interests of Seattle may have against the present rate-making system of the Panama Railroad Company.

Please make any statement not covered by the above questions that you think may have a bearing on the subject of transportation by the way of Panama.

(Signed)

J. L. BRISTOW,

Special Panama Railroad Commissioner.

To the PRESIDENT OF THE CHAMBER OF COMMERCE.]

EXHIBIT K.

Reference of letter of Maj. Gen. George W. Davis, governor of Isthmian Canal Zone, inclosing extract from report of the Select Committee on Panama Canal, Pacific Mail Steamship Company, and Panama Railroad Company, March 3, 1893, and copy of said Congressional report.

WAR DEPARTMENT,
OFFICE OF THE SECRETARY,
January 17, 1905.

Memorandum for the Hon. J. L. Bristow, letter of Gen. G. W. Davis, dated December 17, 1904, inclosing extract of a report of House committee, 1893.

Respectfully referred to Mr. Bristow.

By direction of the Secretary of War:

FRED W. CARPENTER,
Private Secretary.

ISTHMIAN CANAL ZONE,
EXECUTIVE OFFICE,

Ancon, Isthmian Canal Zone, December 17, 1904.

MY DEAR MR. SECRETARY: In overhauling some old Government documents, I chanced upon one to-day which contains the report of a special committee appointed by the House of Representatives in the year 1893, to investigate certain matters connected with the Panama Canal and the Panama Railroad, and the portion of this report that relates to the Panama Railroad I have had copied, and send to you herewith, as it is relevant to the subject concerning which we had a conversation when you were here.

You will see that the disease from which certain interests are suffering is an old one, and it is quite time that some remedy should be applied; if necessary, a drastic one.

I think you will find that the extract I send to you is worth the few minutes it will take to read it.

Sincerely, yours,

GEO. W. DAVIS.

Hon. WM. H. TAFT,
Secretary of War, Washington, D. C.

[Inclosure.]

Report of the Select Committee on Panama Canal, Pacific Mail Steamship Company, and Panama Railroad Company, March 3, 1893.

Resolved, That a special committee of five be appointed by the Speaker to investigate and report as to what sums of money, if any, were expended by the Panama Canal Company, or its promoters, directly or indirectly, for the purpose of preventing opposition in this country to the plans of said company, or securing acquiescence in America thereto, and what disposition was made of such sums; and generally, as to the situation of affairs upon the Isthmus so far as American commerce seeking transit across the same may be concerned; and also, as to the contracts and relations between the Pacific Mail Steamship Company and the Southern Pacific Railroad Company, the Transcontinental Railroad Association, and other railroads; and as to what contracts or other collusive arrangements have been made by said companies whereby the traffic by way of the Isthmus of Panama has been suppressed or diminished; and as to whether said steamship company, by virtue of said contracts or otherwise, has been practically absorbed by or subjected to the control of said railroad companies; and as to whether the business which it was the design of this Government to foster by the sums granted to said steamship company, through mail contracts or otherwise, has been thereby diverted from the Isthmus of Panama and the Panama Railroad Company to such transcontinental companies; and as to whether such acts are detrimental to the interests of American maritime commerce and the producers, manufacturers, and merchants of the United States; and if such abuses are found to exist, by what means the same can or should be suppressed, and as to whether the further grant of said sums to said steamship company should be withdrawn. Said committee shall have the power to send for persons and papers and administer oaths, and the expenses incurred in said investigation shall be

paid out of the contingent fund of the House, and said committee shall have leave to sit during the sessions of the House in Washington or elsewhere.

As to the second part of the resolution referred to your committee, relating to the situation in the last few years and at present of American commerce upon the Isthmus, your committee feels that it has obtained all the evidence needed to establish certain facts beyond controversy. On the 1st of February, 1878, the Pacific Mail Company, a corporation organized under the laws of New York, owning and running steamers between New York and Aspinwall on the Atlantic, and between Panama and San Francisco on the Pacific, together with certain intermediate Central American and Mexican ports, made a contract for fifteen years with the Panama Railroad Company, also a corporation under the laws of New York. At that time there was no showing that there were any foreign stockholders in either of these two corporations.

This contract provided that the Pacific Mail should have the exclusive right "to bill freight through" from New York to San Francisco and vice versa over the Panama Railroad, and all freight offered by others between these points could not be "billed through," but would have to pay local rates on the Isthmus railway.

The sum paid for this was to be a lump sum of \$75,000 a month to the railroad company, which, by modification, was afterwards lowered to \$55,000 a month. A remarkable fact about this contract is that it was the result of a contract made before that time between the Pacific Mail Company and the Transcontinental Railway Pool, as at that date the Association of Transcontinental Railways was called. That was a contract whereby the Transcontinental Railway Pool, embracing all of the roads between the Missouri River and the Pacific seaports, and covering entirely all railway traffic between the Atlantic and Pacific seaboards, several of which had received large donations of public lands, and the bonds of which the United States Government was guaranteeing, paid the Pacific Mail the sum of \$80,000 a month, which was afterwards reduced to \$75,000 a month, for the consideration that the Pacific Mail would carry only 1,200 tons of freight each way a month between New York and San Francisco, and on that freight would allow the transcontinental pool to fix the price and rate to be paid. That was the upshot of the contract, although the form was a reservation of space for 1,200 tons a month for the exclusive benefit of the Transcontinental Railway roads, whether the steamer sailed full or half empty.

After the passage of the interstate-commerce law had compelled the dissolution of the so-called "pool," a Transcontinental Railway Association was formed, which, under some name or other, is still in existence, and down to the present time the Pacific Mail, subsidized by the Government in a large amount each year, has been allowing the Transcontinental Railway to fix the rates and limit the traffic over its lines. These two contracts were so far practically parts of one and the same that the amount paid the Panama Railroad monthly was fixed with regard to that paid to the Pacific Mail by the transcontinental roads, and when the latter was lowered from \$80,000 a month to \$75,000 the former was lowered from \$75,000 to \$55,000. The object is frankly stated by the officers of both the transcontinental roads and the Pacific Mail. It was to maintain rates above the level to which they would fall if free competition between these several routes had continued. It seems to be certain that a very large if not an absolutely controlling interest in the stock and directory of the Pacific Mail Company is owned by individuals and estates very largely interested in the stock and directory of the transcontinental roads; and it is proven that the same individuals composing a majority of the directory of the Pacific Mail composed a majority of the directors present at the meeting of the Panama Railroad Company's directory at which the contract between Pacific Mail and the railroad company of February 1, 1878, was ratified and executed. That this system has for fifteen years been diminishing commerce between New York and San Francisco, across the Isthmus, is not denied. It is stated, as a justification, that the Transcontinental Railway Association, controlling, as it did, under these contracts, the prices and traffic of the Pacific Mail, used the latter as an active factor to defeat the competition of sailing vessels' traffic around Cape Horn, and thus were able to maintain the rates of the railroad companies as against that of sailing vessel competition. It is obvious that this did not tend to increased American shipping or tend to the encouragement of the merchant marine or the commerce of the United States.

It seems to your committee that this state of things can not be beneficial to the general interstate trade or commerce of the United States, nor can it see that it is of any particular benefit to our trade with foreign countries.

It is stated that this arrangement between the Pacific Mail and the Transcontinental Railway Association came to an end in December last, which is just about the time that negotiations between the Panama Railroad Company and the Pacific Mail as to a renewal of the former contract seems to have fallen through. And it is likewise in evidence that the final check to the attempts at making a new contract between the Panama Railroad Company and the Pacific Mail was given by the following letter to the vice-president of the railroad company from the controlling member of the executive committee of the Pacific Mail, who is also universally recognized as one of the controlling influences of the transcontinental railways:

C. P. HUNTINGTON, 23 BROAD STREET,
New York, December 28, 1892.

CHARLES COUDERT, Esq.,
68-70 William Street, New York.

MY DEAR SIR: Herewith I return memorandum that you gave me on Monday. Of course this would not do, but it does seem to me as though there could be such a contract made as would be largely beneficial to both interests.

Yours, truly,

C. P. HUNTINGTON.

Whatever be the case in the last sixty days, it is perfectly clear to your committee that the Panama Railroad Company has for fifteen years been prevented by these arrangements from being a competitor with the transcontinental railway lines.

Your committee recommends that whenever, under provisions of the act of March 3, 1891, "for ocean mail service and to promote commerce," the Postmaster-General shall enter into a contract with any line of vessels, a clause shall be inserted in said contract to the effect that if said steamship line shall enter into any combination or arrangement with competing lines of traffic the result of which is to diminish traffic or raise or maintain rates of freight on American commerce, foreign or domestic, over what free competition would effect, that said contract may be terminated forthwith by the Postmaster-General.

Your committee regret, so far as the ownership of nearly all the stock goes, that the control of any American corporation, as the Panama Railroad is, should be held in foreign hands, particularly in the hands of the liquidator or receiver of another corporation, also foreign, appointed by foreign judicial authority and subject to foreign judicial supervision. It fails to see, however, that any law, treaty stipulation, or contract obligation has been violated by the purchase of these railroad shares by the Panama Canal Company, or that as yet any discrimination has been attempted against American commerce or any injustice practiced thereon on account of such foreign ownership of this stock. The restrictions and injuries American trade and commerce have sustained have been laid on them by American citizens controlling various other American corporations, and it is not a pleasing subject to contemplate.

Your committee can not refrain from calling attention to what seems to be an obvious deduction from the facts shown, that it is the interest of the United States that the American people should absolutely control some outlet across the Isthmus, at some point which shall be used for the benefit of American trade in general as an open and continuous competitor, affording no opportunity for entangling subsidies from great competing lines or chance of falling into the grasp of any monopoly through stock manipulations.

(Signed)

JOHN R. FELLOWS, Chairman.
T. J. GEARY.
JOSIAH PATTERSON.
H. HENRY POWERS.
BELLAMY STORER.

[House Report No. 2615, Fifty-second Congress, second session.]

INVESTIGATION OF PANAMA CANAL.

March 3, 1892.—Laid on the table and ordered to be printed.

Mr. Fellows, from the Special Committee to Investigate the Panama Canal Company, etc., submitted the following report:

The Committee on Rules, to whom were referred the resolutions heretofore introduced by Mr. Fellows and Mr. Geary, respectively, reported the same back with the recommendation that the resolution herewith submitted be adopted in lieu thereof, viz:

Resolved, That a special committee of five be appointed by the Speaker to investigate and report as to what sums of money, if any, were expended by the Panama Canal Company, or its promoters, directly or indirectly, for the purpose of preventing opposition in this country to the plans of said company, or securing acquiescence in America thereto, and what disposition was made of such sums; and generally as to the situation of affairs upon the Isthmus so far as American commerce seeking transit across the same may be concerned; and also as to the contracts and relations between the Pacific Mail Steamship Company and the Southern Pacific Railroad Company, the Transcontinental Railroad Association, and other railroads; and as to what contracts or other collusive arrangements have been made by said companies whereby the traffic by way of the Isthmus of Panama has been suppressed or diminished; and as to whether said steamship company, by virtue of said contracts or otherwise, has been practically absorbed by or subjected to the control of said railroad companies; and as to whether the business which it was the design of this Government to foster by the sums granted to said steamship company, through mail contracts or otherwise, has been thereby diverted from the Isthmus of Panama and the Panama Railroad Company to such transcontinental companies; and as to whether such acts are detrimental to the interests of American maritime commerce and the producers, manufacturers, and merchants of the United States; and if such abuses are found to exist, by what means the same can or should be suppressed, and as to whether the further grant of said sums to said steamship company should be withdrawn. Said committee shall have the power to send for persons and papers and administer oaths, and the expenses incurred in said investigation shall be paid out of the contingent fund of the House, and said committee shall have leave to sit during the sessions of the House in Washington or elsewhere."

Your committee, to which was referred the foregoing resolution, finds itself confronted with the fact that this session will close within a few days and that some report is demanded during the very last week of an expiring Congress.

The matters referred to in the resolution are so varied and distinct in their nature that while the committee finds itself able authoritatively to report on certain of the subjects contained in it, feeling confident that the true facts have been thoroughly disclosed, as to other matters referred your committee does not feel that same confidence; and should the House desire further investigation of some of the subjects embraced in this resolution, your committee does not feel justified in saying that no ground for such action exists. Your committee has not felt itself compelled to go through the great mass of diplomatic papers and correspondence which has accumulated during the present century between various foreign powers and the United States on the subject of transit across the Isthmus of Panama. Your committee has examined the matter sufficiently to be able to say that as far as the treaty of 1846 with New Granada is concerned, and so far as the concession granted to and contracts made with the present Panama Railroad corporation, there is no clear ground for the assertion that any exclusive right to cross the Isthmus was ever in terms granted, or by implication secured, either to an American corporation or to citizens of the United States, to the exclusion of citizens of any other country.

The original concession to Howland and Aspinwall was simply the transfer of the concession theretofore given to a French corporation, which concession had been surrendered back to the Government of New Granada. The rights of the Panama Railroad Company are simply those conveyed to it by Howland and Aspinwall, affirmed and modified only by subsequent contracts with the Government of New Granada. There does not seem to be any ground, so far as the evidence adduced before this committee goes, for the claim that the Government of New Granada or the United States of Colombia has ever guaranteed that the United States shall control the transit, or place any limi-

tation on the legal rights of shareholders in the railway company or restriction in the nationality of the owners of its stock.

The Panama Railroad is a corporation under the laws of New York, and its directory and the rights of ownership of its shares are governed by the laws of that State.

Your committee, being instructed to ascertain whether any sums of money were expended by the Panama Canal Company, or its promoters, for the purpose of preventing opposition in this country to the plans of said canal, has done its utmost in the limited time before the end of the present Congress to investigate this matter. It has been unable thus far to trace directly or indirectly the expenditure of any money whatever in a corrupt way to influence the legislative or executive action of the United States Government. It may be that no investigation, however prolonged, after this lapse of time could be efficient in making such discovery, even if such corrupt use of money was made, but this is the subject of which your committee does not desire authoritatively to express its opinion that further investigation would be entirely fruitless.

Certain facts in relation to the expenditure of money on the part of the canal company, however, are distinctively proven.

In the year 1879 the original subscription to the stock of the Panama Company was opened in France, of which country the canal company, by its technical name of the Universal Inter-Oceanic Canal Company, is a corporation. The original subscription was an entire failure, and great weight must be given to the opinion that it was a failure principally on account of the distrust as to the attitude of the United States toward his canal project, which was universally entertained in Europe. It is a fact too well known to have required testimony to be offered that the entire tone of the executive branch of this Government during the Administration of President Hayes and the entire current of our diplomatic correspondence was one of intense loyalty to the idea that not merely no foreign government, but no foreign corporation indirectly supported or controlled by any foreign government, should ever obtain any right to construct a canal across the Isthmus. In fact, during the two years preceding the close of the Hayes Administration the correspondence of our Government was kept within ordinary diplomatic courtesy of protest on this subject only by the belief, which results have proved to be well founded, that the canal constructed on the plans and ideas of De Lesseps and his associates was an idle dream, practically hopeless of accomplishment.

It seems clear that the promoters of the canal company saw that no success would attend their efforts to obtain subscriptions in Europe unless the public opinion of America on this subject should either be modified or that the people of Europe should be persuaded that the public opinion of the American people had been modified. De Lesseps visited this country in the winter of 1879-80, and a single instance will show how determined the promoters of the canal were, whatever was the popular opinion in this country, that Europe should be persuaded that it was not hostile to the canal. On the very day of De Lesseps's arrival in Washington President Hayes sent his message to Congress affirming in strong terms the position of his Administration as to the Monroe doctrine in its broadest acceptance. That message as it appeared in the press was translated to De Lesseps, and his answer was characteristic and immediate. To the amazement of his American friends, who had translated him this message, he at once telegraphed to Paris that the President's message had guaranteed the neutrality of the Panama Canal. This seemed to be the beginning of a great change in the tone of the press of Paris and of France, and from the time of De Lesseps's visit to this country there seemed to be an assurance that America was not hostile, but on the contrary very friendly, to the enterprise. It was after the return of De Lesseps to France that the decision was made that an American committee of men of prominence whose solid names would be a guaranty of the financial stability of the enterprise should be selected.

The object of this is perfectly clear. It was to give a widespread public impression that American capital, in the persons of some of its most respectable agencies, with ramifications, correspondents, and connections in every financial center of all localities in the United States, was backing the enterprise, and that Americans intended to become shareholders in the canal. It was intended first by the gentlemen who were selected to compose this committee to choose General Grant to lend his name to this enterprise, to give to this American committee not merely financial weight but the patriotic glory of a great name at the head of it, so as to impress the American people with its international or binational character. General Grant having declined, it was clear that the next

best thing to do was to secure the name, as chairman of this committee, of some gentleman widely known, of political experience and position, and, if possible, one whose orthodoxy in the past in relation to the Monroe doctrine would make his support of the canal project all the stronger in the eyes of the American people. The American committee, by mutual agreement, under suggestions from the financial agents of the canal company in Paris, had already been composed of the great banking houses of J. & W. Seligman, Drexel, Morgan & Co., and Winslow, Lanier & Co., of New York. Each of these houses was to designate one of its members to form the American committee, and the then Secretary of the Navy, Hon. R. W. Thompson, was decided upon as chairman, and in the autumn of 1880 the offer was made to him, through J. & W. Seligman, to leave the Cabinet and assume the title of the chairman of the American committee, with a salary to be paid at not less than 125,000 francs.

The house of Seligman & Co., of London, in which the New York banking firm of J. & W. Seligman were interested, had been the financial agents of the Navy Department during the Hayes Administration, and personal acquaintance between the Seligmans and Mr. Thompson had been the consequence.

The only testimony obtainable as to the reasons which induced Mr. Thompson to consent to take this step is his own recollection of what was in his mind at that time. He states that after he decided on this step, he notified the President of his intention and that the President acquiesced in it; and his resignation, under these circumstances, caused no severance of the personal friendly relations between them. This may be true, but it is difficult to see what the President could have done to show any want of acquiescence when one of his Cabinet tendered his resignation and explained that it was to assume a position of great apparent financial responsibility and importance, with a salary three times greater than he received as head of the Navy Department.

Testimony has been taken showing that this action on the part of the Secretary of the Navy was a great disappointment and surprise to Mr. Hayes, and he so expressed himself to others than Mr. Thompson.

It is clear that the whole tone of the administration had been suspicious of and hostile toward the enterprise into which Mr. Thompson was willing to go, and it is practically clear that had not Mr. Thompson been a member of that Administration, no controlling reason existed for his selection as chairman of a committee intrusted, or supposed to be intrusted, with such great financial and commercial responsibilities.

Mr. Thompson tendered his resignation early in December, 1880, and it was formally accepted by the President a few days thereafter. It is significant of the controlling reasons for the haste in which this matter of Mr. Thompson's resignation from the Cabinet was concluded by him that we find him writing, on December 16, that arrangements should be made that his salary should begin on the 20th of December, in order that his friends might "be assured that his position was fixed beyond a peradventure," and that a promise to this effect "would satisfy his friends and put the Nicaraguans on their backs."

It was at this time that the Forty-sixth Congress appointed a special committee to examine and report on interoceanic routes. At the same time the Committee on Foreign Affairs was charged with the examination and report upon the so-called "Crapo resolution," as to whether the Panama Canal project was a violation of the Monroe doctrine or was detrimental to American interests.

In the Senate the Burnside resolution to a similar effect was under consideration.

Your committee repeat that it has not found any evidence to show that any corrupt or improper means were used to stifle the investigation or the discussion of these resolutions. In fact, in spite of the arguments of Mr. Thompson and the counsel employed by him to assist, the Crapo resolution was reported back to the House in a somewhat modified form, but with a report ringing with true American patriotism and a manly, yet conservative, assertion of the Monroe doctrine as it is generally understood in the United States.

The select committee on interoceanic routes also made a report strongly supporting the idea that the United States should control all transit over the Isthmus—at least in so far as to prevent any European or non-American nation from having a preponderating influence. But it will be remembered that it was at the short session of the Fortieth Congress, with a change of Administration coming on the 4th of March, that these reports were made, as the present one will be, just at the close of the session, and your committee can see reasonable ground for the belief that these resolutions and reports were not acted upon

simply from the general apathy of the House and the stress of other business at the close of the session.

Your committee find that for the next three or four years Colonel Thompson was exceedingly vigilant in watching the legislation of Congress and most active and able in his efforts and influence to postpone the consideration of any legislation, either directly or indirectly, tending to work an injury to the cause of the Panama Canal Company. He appeared before committees, House and Senate, personally and by printed arguments and briefs. These, he thinks, had great weight in the defeat of the Nicaragua Canal plans in whatever shape they came up, but it is not clear that, outside of this, he had anything directly to do with the shaping of public opinion in this country or bringing about what seems to have been an apparent acquiescence, or at least an indifference on the part of the press and the people. So far as the testimony goes, the work of the American committee was altogether done by Mr. Thompson, and consisted of supervising purchases for a part of the time for the construction of the canal, and this persistent, watchful, and successful supervision of the legislation of the United States.

The members of the American committee other than himself were supposed by Mr. Thompson to have received no compensation whatever except their commission as bankers and brokers in obtaining subscriptions and furthering the sale of the stocks and bonds of the canal company and in handling and transmission of the very large amount of money spent in this country for the purchase of supplies of various kinds. It was the object of the committee to see that to as great an extent as possible the purchase of supplies of raw material, of machinery, and tools should be made in the United States as an aid to make it appear that America had no hostility but every reason to look with a friendly eye on this enterprise. The total amount of money for purchases of this kind passing through the single house of J. & W. Seligman and distributed to American trade was upward of \$40,000,000, and that house is not able to say that no further accounts of money came through other banking houses to be spent in America for similar ends. This, however, was all spent by purchasing agents of the canal company, and their vouchers for their purchases were forwarded to Paris for approval. There was one thing, however, which struck the only three salaried officers of the Panama Canal Company whose testimony we have been able to get as an entire surprise. This fact is that these three banking houses named above received, apparently for the loan of their names and for nothing else to this enterprise, the immense sum of 6,000,000 francs, or \$1,200,000; \$400,000 apiece, or \$50,000 a year was paid these houses without the knowledge of the chairman of that committee, who all the time supposed that he was the important factor in this enterprise and was himself receiving only half of that sum annually.

In fact, two years before the canal company went into liquidation it is in evidence that Mr. Thompson voluntarily reduced his salary by one-half—that is, to \$12,500—remaining in complete ignorance that the other members of the committee, of which he was still chairman, were still each receiving \$50,000. These banking houses state that they had no specific duties to render in return for these subsidies; that they had no employment or interest to effect the sale of canal stock or bonds, and that, in fact, practically none were sold in the United States. What influence was exercised upon the financial public opinion of the United States by the names of these three great banking houses; what indirect credit and popularity was given to the enterprise through their numerous correspondents and connections throughout the country is perhaps impossible now to estimate, but to effect this was the object of the formation of this American committee—a committee which testifies that it had no regular meetings, and some members of which were never present at a meeting or knew whether any minutes were ever kept by the committee, while each of these houses were receiving \$400,000. This fact, if it is a measure of the general conduct and management of the Panama Canal Company, may possibly explain why it was compelled to go into liquidation as soon as it did.

The only specific matter the three banking members of the American committee seem to have had in charge and to have accomplished was the purchase of the stock of the Panama Railroad Company by the canal company at a price more than double what it had been quoted in the market for two or three years previous to the beginning of these negotiations. This stock had been selling from \$140 to \$150, and the result of the negotiation and contract of sale was that the Panama Canal Company purchased 68,500 shares out of the 70,000 shares of stock at a price of \$291—\$250 a share for the stock, \$41 and some

cents on each share for certain "assets" of the railroad company, the nature of which is not very clear.

It may not be out of place to state that in pursuance of this purchase these "assets" were sold to be bought by a "syndicate," and that syndicate was composed of Messrs. J. & W. Seligman, Winslow, Lanier & Co., and Drexel, Morgan & Co., who had been managing the purchase of the Panama Railroad stock on behalf of the canal company. These negotiations and the price paid for this stock by the canal company, however, may not come within the strict purview of the resolution of Congress.

As to the second part of the resolution referred to your committee relating to the situation in the past few years and at present of American commerce upon the Isthmus, your committee feels that it has obtained all the evidence needed to establish certain facts beyond controversy. On the 1st of February, 1878, the Pacific Mail Company, a corporation organized under the laws of New York, owning and running steamers between New York and Aspinwall on the Atlantic, and between Panama and San Francisco on the Pacific, together with certain intermediate Central American and Mexican ports, made a contract for fifteen years with the Panama Railroad Company, also a corporation under the laws of New York. At that time there was no showing that there were any foreign stockholders in either of these two corporations.

This contract provided that the Pacific Mail should have the exclusive right "to bill freight through" from New York to San Francisco and vice versa over the Panama Railroad, and all freight offered by others between these points could not be "billed through," but would have to pay local rates on the Isthmus railway. The sum paid for this was to be a lump sum of \$75,000 a month to the railroad company, which, by modification, was afterwards lowered to \$55,000 a month.

A remarkable fact about this contract is that it was the result of a contract made before that time between the Pacific Mail Company and the Transcontinental Railway Pool, as at that date the Association of Transcontinental Railways was called. That was a contract whereby the Transcontinental Railway Pool, embracing all of the roads between the Missouri River and the Pacific seaports, and covering entirely all railway traffic between the Atlantic and Pacific seaports, several of which had received large donations of public lands and the bonds of which the United States Government was guaranteeing, paid the Pacific Mail the sum of \$90,000 a month, which was afterwards reduced to \$75,000 a month, for the consideration that the Pacific Mail would carry only 1,200 tons a month of freight each way between New York and San Francisco, and on that freight would allow the transcontinental pool to fix the price and rate to be paid. That was the upshot of the contract, although the form was a reservation of space of 1,200 tons a month for the exclusive benefit of the Transcontinental Railway roads—whether the steamer sailed full or half empty.

After the passage of the interstate commerce law had compelled the dissolution of the so-called "pool," a transcontinental railway association was formed, which, under some name or other, is still in existence; and down to the present time the Pacific Mail, subsidized by the Government in a large amount each year, has been allowing the transcontinental railways to fix the rates and limit the traffic over its line. These two contracts were so far practically parts of one and the same that the amount paid the Panama Railroad monthly was fixed with regard to that paid to the Pacific Mail by the transcontinental roads, and when the latter was lowered from \$90,000 a month to \$75,000 the former was lowered from \$75,000 to \$55,000. The object of this is frankly stated by the officers of both the transcontinental roads and the Pacific Mail; it was to maintain rates above the level to which they would fall if free competition between these several routes had continued.

It seems to be certain that a very large if not an absolutely controlling interest in the stock and directory of the Pacific Mail Company is owned by individuals and estates very largely interested in the stock and directory of the transcontinental roads; and it is proven that the same individuals composing a majority of the directory of the Pacific Mail composed a majority of the directors present at the meeting of the Panama Railroad Company's directory at which the contract between the Pacific Mail and the railroad company of February 1, 1878, was ratified and executed. That this system has for fifteen years been diminishing commerce between New York and San Francisco across the Isthmus is not denied. It is stated as a justification that the Transcontinental Railway Association, controlling, as it did, under these contracts, the prices and traffic of the Pacific Mail, used the latter as an active factor to

defeat the competition of sailing-vessel traffic around Cape Horn, and thus were able to maintain the rates of the railroad companies as against that of sailing-vessel competition. It is obvious that this did not tend to increase American shipping or tend to the encouragement of the merchant marine of the commerce of the United States.

It seems to your committee that this state of things can not be beneficial to the general interstate trade or commerce of the United States, nor can it see that it is of any particular benefit to our trade with foreign countries. It is stated that this arrangement between the Pacific Mail and the Transcontinental Railway Association came to an end in December last, which is just about the time that negotiations between the Panama Railroad Company and the Pacific Mail as to a renewal of the former contract seems to have fallen through. And it is likewise in evidence that the final check to the attempts at making a new contract between the Panama Railroad Company and the Pacific Mail was given by the following letter to the vice-president of the railroad company from the controlling member of the executive committee of the Pacific Mail, who is also universally recognized as one of the controlling influences of the transcontinental railways:

C. P. HUNTINGTON, 23 BROAD STREET,
New York, December 28, 1892.

CHARLES COUDERT, Esq.,
68-70 William street, N. Y.

MY DEAR SIR: Herewith I return memorandum that you gave me on Monday. Of course this would not do, but it does seem to me as though there could be such a contract made as would be largely beneficial to both interests.

Yours, truly,

C. P. HUNTINGTON.

Whatever be the case in the next sixty days, it is perfectly clear to your committee that the Panama Railroad Company has for fifteen years been prevented by these arrangements from being a competitor with the transcontinental railway lines.

Your committee recommends that whenever, under provisions of the act of March 3, 1891, "for ocean mail service and to promote commerce," the Postmaster-General shall enter into contract with any line of vessels, a clause shall be inserted in said contract to the effect that if said steamship line shall enter into any combination or arrangement with competing lines of traffic the result of which is to diminish traffic or raise or maintain rates of freight on American commerce, foreign or domestic, over what free competition would effect, that said contract may be terminated forthwith by the Postmaster-General.

Your committee regrets, so far as the ownership of nearly all the stock goes, that the control of any American corporation, as the Panama Railroad is, should be held in foreign hands, particularly in the hands of the liquidator or receiver of another corporation, also foreign-appointed by foreign judicial authority and subject to foreign judicial supervision. It fails to see, however, that any law, treaty stipulation, or contract obligation has been violated by the purchase of these railroad shares by the Panama Canal Company, or that as yet any discrimination has been attempted against American commerce or any injustice practiced thereon on account of such foreign ownership of this stock. The restrictions and injuries American trade and commerce have sustained have been laid on them by American citizens controlling various other American corporations, and it is not a pleasing subject to contemplate.

Your committee can not refrain from calling attention to what seems an obvious deduction from the facts shown, that it is to the interest of the United States that the American people should absolutely control some outlet across the Isthmus at some point, which shall be used for the benefit of American trade in general as an open and continuous competitor, affording no opportunity for entangling subsidies from great competing lines or chance of falling into the grasp of any monopoly through stock manipulation.

JOHN R. FELLOWS, Chairman.
T. J. GEARY.
JOSIAH PATTERSON.
H. HENRY POWERS.
BELLAMY STORER.

EXHIBIT L.

Copy of letter to Mr. R. P. Schwerin, vice-president and general manager of the Pacific Mail Steamship Company, and his reply, with inclosures.

SAN FRANCISCO, CAL., March 25, 1905.

MY DEAR SIR: As a result of our conversation yesterday, I will be greatly obliged if you will advise me upon the following:

If the contract which now exists between the Panama Railroad Company and the Pacific Mail Steamship Company is canceled and the privilege of through bills of lading given to all responsible ocean transportation lines, would the business that your company could secure in competition with the other lines doing business on the Pacific coast justify it in maintaining a regular weekly schedule from San Francisco to Ancon?

If the Pacific Mail Steamship Company would not be justified in maintaining its regular weekly schedule, will you please state fully why?

If the privilege of through bills of lading were given to all ships sailing under the American flag and withheld from ships sailing under foreign flags, would the Pacific Mail Steamship Company maintain a regular weekly schedule service between San Francisco and Ancon?

What are the wages paid by the Pacific Mail Steamship Company on its Panama line?

What are the wages paid by the American-Hawaiian line on its ships plying between Hawaii, San Francisco, and New York?

What are the wages paid by the Pacific Coast Steamship Company on its ships doing a coasting business?

What are the wages paid by the Kosmos line, the Chilean line, and other foreign steamship lines doing business on the western coast of North and South America?

Are the higher wages which an American steamship line is compelled to pay over those paid by foreign lines the only difference in the expense of operating a steamship sailing under the American or a foreign flag?

Can you advise me the difference in the cost of building ships in the shipyards of the United States, Great Britain, France, and Germany—that is, if the plans for a ship were submitted to shipbuilders in the countries enumerated above, can you estimate with a degree of accuracy what would be the difference in the cost of the vessel?

Very truly, yours,

(Signed) J. L. BRISTOW,
Special Panama Railroad Commissioner.

Mr. R. P. SCHWERIN,

General Manager Pacific Mail Steamship Company,
San Francisco, Cal.

SAN FRANCISCO, CAL., April 11, 1905.

HON. J. L. BRISTOW,

Special Panama Railroad Commissioner,
War Department, Washington, D. C.

DEAR SIR: Referring to your letter dated San Francisco, March 25:

Regret my inability to reply to you before, but was called out of town immediately after you left, and this is the first opportunity I have had to reply categorically to your questions, which I take pleasure in doing, as follows:

1. If the contract which now exists between the Panama Railroad Company and the Pacific Mail Steamship Company is canceled and the privilege of through bills of lading given to all responsible ocean transportation lines, would the business that your company could secure in competition with the other lines doing business on the Pacific coast justify it in maintaining a regular weekly schedule from San Francisco to Ancon?

Answer. It would not be possible for the Pacific Mail Steamship Company to maintain a regular weekly schedule from San Francisco to Ancon under the above conditions, no matter how much its owners might desire to maintain the integrity of the line and sustain the American flag on the Pacific Ocean in the foreign trade.

2. If the Pacific Mail Steamship Company would not be justified in maintaining its regular weekly schedule, will you please state fully why?

Answer. The Pacific Mail Steamship Company now maintains a regular schedule between San Francisco and Ancon, and it requires nine steamers to perform the regular service, as the distance between San Francisco and Ancon is 8,474 miles. These vessels now take freight from San Francisco to the ports of the following countries: Mexico, Guatemala, Salvador, Honduras, Nicaragua, Costa Rica, Colombia, and the west coast of South America. They also transact the local business between the ports of these countries and handle, via the Isthmus of Panama, freight from the west coast of the United States to ports of the Atlantic coast, ports of the West Indies, the northeast coast of South America and to Europe, including those of the United Kingdom, France, Germany, and the Mediterranean, and the company receives at Ancon from its connecting carriers return freight from the countries noted above, and also handles the local business between Central American and Mexican ports.

South of Acon on the west coast of South America two lines of foreign steamers are in operation, the Pacific Steam Navigation Company, a British organization subsidized by the British Government, and the Compania Sud-Americana de Vapores, a Chilean corporation subsidized by the Chilean Government. These two lines do not operate north of Panama. There is also a German line called the Kosmos Steamship Company controlled largely by the interests of the Hamburg-American Packet Company, flying the German flag. This line operates steamers from Hamburg to ports on the west coast of South America, via the Straits of Magellan, touching at Central American and Mexican ports, San Francisco and Puget Sound ports, and on the return voyage to Hamburg touches at ports named in a reverse order. This last-mentioned line is to-day a direct competitor with the Pacific Mail Steamship Company for all classes of its business, both north and south bound, excepting that which must be exclusively carried in American bottoms, i. e., freight originating on the Pacific coast of the United States and destined to the Atlantic coast of the United States and carried via the Isthmus or vice versa. Its steamers sail side by side with us, loaded with American commodities for the Mexican and Central American countries and transact the local business between ports of Mexico and Central America. It has to-day every advantage that the Pacific Mail Steamship Company has with the exception that it takes its freight through the Straits of Magellan and does not through bill via the Isthmus. This line carries freight and passengers. Their steamers are of a large freight carrying capacity, cheaply manned and operated with foreign officers and Chilean crews. The officers are paid the wages out of Hamburg. From Hamburg to Valparaiso the crew is a skeleton German crew and at the latter port Chilenos are taken aboard to make up the complement and they are paid silver wages.

The Pacific Steam Navigation Company pay their officers British wages out of the port of Liverpool, and the crew are all Chilenos at silver wages. The Compania Sud-Americana de Vapores pays its officers and crew silver wages.

The service of the Kosmos Line has been somewhat irregular, and as we have endeavored to operate our line with the greatest possible regularity, we have had the advantage in the carrying of freight and passengers up to the present. If, however, the Isthmus is thrown open and the South American companies extend their service to San Francisco or Puget Sound (and they have been offered an additional subsidy by the Dominion government to go to British Columbian ports) ship for ship, it is impossible for us to carry freight and passengers in competition with these three lines and live, as the Isthmus and the local coast business would be divided between four lines; and it is manifestly evident that the American line can not continue to exist for the reason that not only is there not enough business for four lines, but with the keenest economy of operation the American line can not compete with its foreign competitors in view of the increased cost of its operating expenses.

During the fiscal year May 1, 1903, to April 30, 1904, the Pacific Mail Steamship Company handled from all sources 211,450 tons. Of this 70,120 tons were what is known as purely American freight—i. e., freight between Atlantic coast and Pacific coast ports of the United States, and which must be carried in American bottoms. The balance of 141,330 tons included all business exclusive of American freight. The company's gross earnings on the Panama line, passenger and freight, were \$1,548,733.73. The gross earnings on the American freight only were \$360,303.53. The gross operating expenses for the above period were \$1,561,908.31. From the above you can readily see if we lost, say, 50 per cent of the competitive freight and passenger business and carried all the American freight, which gave us gross earnings of \$360,303.53 during the period

above mentioned, and had to meet the operating expenses of a regular weekly schedule of \$1,561,908.31, that the situation would be hopeless.

3. If the privilege of through bills of lading were given to all ships sailing under the American flag and withheld from ships sailing under foreign flags, would the Pacific Mail Steamship Company maintain a regular weekly schedule service between San Francisco and Ancon?

Answer. If the privilege of through bills of lading were given to all ships sailing under the American flag and withheld from ships sailing under foreign flags, the Pacific Mail Steamship Company would maintain a regular weekly service between San Francisco and Ancon, and continue to do so, making every effort to build up its line by obtaining as fast as possible American vessels of new and modern construction, which could be operated more economically, and of a type which could be operated through the canal upon its completion.

4. What are the wages paid by the Pacific Mail Steamship Company on its Panama line?

Answer. Please see pages 107, 109, and 111 of statement attached hereto, marked 1, showing the wages paid on the Pacific Mail steamers *Acapulco*, *City of Sydney*, and *Newport*, operating between San Francisco and Ancon.

5. What are the wages paid by the American-Hawaiian Line on its ships plying between Hawaii, San Francisco, and New York?

Answer. Please see statement hereto attached, marked 1, page 187, showing the wages paid on the steamship *Teran*, of the American-Hawaiian Line.

6. What are the wages paid by the Pacific Coast Steamship Company on its ships doing a coasting business?

Answer. Please see statement hereto attached, marked 1, page 187, showing the wages paid on the steamship *City of Puebla* and the steamship *Umatilla*, of the Pacific Coast Steamship Company.

7. What are the wages paid by the Kosmos Line, the Chilean Line, and other foreign steamship lines doing business on the western coast of North and South America?

Answer. Please see book hereto attached, marked 1, pages 107, 109, and 111, showing wages paid on the Compania Sud-Americana de Vapores steamers *Palena*, *Aconcagua*, and *Limari*, and page 113, showing wages paid on the steamship *Ramses*, of the Kosmos Line; also statement hereto attached, marked 2, showing wages paid on the Pacific Steam Navigation Company's steamer *Manavi*.

8. Are the higher wages which an American steamship line is compelled to pay over those paid by foreign lines the only difference in the expense of operating a steamship sailing under the American or a foreign flag?

Answer. No; the cost of feeding is higher, the cost of repairs is higher, the cost of fuel is higher, expense of docking for cleaning and painting is higher, and the taxes are higher. Our repairs must necessarily be made here at the home port. The Kosmos Line, for the same reason, repairs its vessels in Hamburg, and the Pacific Steam Navigation Company and the Compania Sud-Americana de Vapores in Valparaiso. It is not necessary for me to call your attention to the fact that we can not do repairs at San Francisco as cheaply as they can be done either in Hamburg or Valparaiso. Repairs must be done at the home port, where the ship is empty of passengers and cargo. The South American Company at one time ran to San Francisco. You will have no difficulty in obtaining from the shops here statements to the effect that they made practically no repairs at this port, whereas the repairs of Pacific Mail Steamship Company run as high as \$100,000 to \$150,000 per annum here. Foreign lines will have no connection of that kind. Their business will be transacted by foreign firms at this port. During the fiscal year above noted we paid for repairs in San Francisco \$137,755.68.

9. Can you advise me of the difference in the cost of building ships in the shipyards of the United States, Great Britain, France, and Germany—that is, if the plans for a ship were submitted to shipbuilders in the countries enumerated above—can you estimate with a degree of accuracy what would be the difference in the cost of the vessel?

Answer. Please see pages 34 to 38, inclusive, of statement hereto attached, marked 1, and also refer to the other statements made during the investigations of the Merchant Marine Commission, which will probably reply to your query better than it could be replied to in any other manner.

Yours, truly,

R. P. SCHWERIN,
Vice-President and General Manager.

Pacific Mail Steamship Company—Statement of tonnage handled on the Panama line during the fiscal year commencing May 1, 1903, and ending April 30, 1904.

Showing proportions of through freight (i. e., freight tonnage transported from New York to San Francisco, and vice versa) to all freight tonnage handled.

NOTE.—Tonnage between New York and San Francisco, under United States law, can only be handled by ships sailing under American flag.

Date.	Through tonnage—		Total.	All other tonnage.	Total tonnage.
	San Francisco to New York.	New York to San Francisco.			
May, 1903.....	2,787	4,555	7,292	9,546	16,838
June, 1903.....	2,458	8,978	6,436	10,385	16,821
July, 1903.....	2,304	2,548	4,847	8,657	13,504
August, 1903.....	3,291	3,377	6,668	10,094	16,762
September, 1903.....	2,880	2,707	5,587	7,942	13,529
October, 1903.....	4,134	2,579	6,713	10,099	16,812
November, 1903.....	2,644	2,399	5,043	10,421	15,464
December, 1903.....	1,642	2,276	3,918	10,050	13,968
January, 1904.....	2,160	3,401	5,561	17,921	23,482
February, 1904.....	1,757	2,811	4,568	19,017	23,585
March, 1904.....	1,868	1,760	3,628	13,002	16,630
April, 1904.....	5,162	6,697	9,859	12,125	21,984
Through tonnage..... per cent..	31,037	59,093	70,120	141,390	211,450
All other tonnage..... do.....					55.16
					66.84

Correct:

SAN FRANCISCO, CAL., April 12, 1905.

H. E. A. CARLTON, Auditor.

Pacific Mail Steamship Company—Comparative crew list, showing officers and crew and rate of wages per month.

[American steamship Newport, gross tonnage 2,785, versus the British steamship Lincari, gross tonnage 2,647.]

Operating between San Francisco and Panama.				Operating between Valparaiso and Ocosingo.			
No. of men.	Rating.	European or Asiatic.	Rate per man per month. ^a	No. of men.	Rating.	European or Asiatic.	Rate per man per month. ^a
<i>Saloon officers.</i>				<i>Saloon officers.</i>			
1	Captain	European	\$200.00	1	Captain	European	\$172.55
1	First officer	do	100.00	1	First officer	do	61.90
1	Chief engineer	do	150.00	1	Chief engineer	do	121.50
1	Purser	do	100.00	1	Purser	do	104.30
1	Surgeon	do	60.00	1	Surgeon	do	54.80
1	Freight clerk	do	75.00	1	Freight clerk	do	75.75
<i>Deck department.</i>				<i>Deck department.</i>			
1	Second officer	European	60.00	1	Second officer	European	42.74
1	Third officer	do	50.00	1	Third officer	do	34.02
1	Fourth officer	do		1	Fourth officer	do	
1	Fifth officer	do		1	Fifth officer	do	
1	Sixth officer	do		1	Sixth officer	do	
1	Carpenter	European	50.00	1	Carpenter	do	21.31
1	Carpenter's mate	do		1	Carpenter's mate	do	
1	Main deck watch	do		1	Main deck watch	do	
1	Plumber	do		1	Plumber	do	
4	Quartermasters	European	140.00	4	Quartermasters	European	30.06
1	Boatswain	do	35.00	1	Boatswain	do	14.88
1	No. 2 boatswain	do		1	No. 2 boatswain	do	
1	Sailmaker	do		1	Sailmaker	do	
7	Deck engineers	European	210.00	7	Deck engineers	European	107.10
1	Seaman	do	30.00	1	Seaman	do	8.22
1	Mess boy	do		1	Mess boy	do	7.95
1	Storekeeper	do		1	Storekeeper	do	
<i>Engineers' department.</i>				<i>Engineers' department.</i>			
1	First assistant engineer	European	90.00	1	First assistant engineer	European	72.90
1	Second assistant engineer	do	80.00	1	Second assistant engineer	do	56.22
1	Third assistant engineer	do	70.00	1	Third assistant engineer	do	45.00
1	Junior engineers	do		1	Junior engineers	do	

^a United States gold.^b Equivalent in United States gold.

Pacific Mail Steamship Company—Comparative crew list, showing officers and crew and rate of wages per month.—Continued.

Operating between San Francisco and Valparaiso.				Operating between Valparaiso and Ocos.			
No. of men.	Rating.	European or Asiatic.	Rate per man per month. ^a	No. of men.	Rating.	European or Asiatic.	Rate per man per month. ^b
<i>Engineers' department—cont'd.</i>				<i>Engineers' department—cont'd.</i>			
3	Ice engineer	European		3	Ice engineer	European	\$18.19
3	Electrician	do	\$50.00	3	Electrician	do	\$54.57
	Water tenders	European			Water tenders	do	44.64
	Oilers	do			Oilers	do	
	No. 1 fireman	do			No. 1 fireman	do	
	No. 2 fireman	do			No. 2 fireman	do	
	No. 3 fireman	do			No. 3 fireman	do	
7	Firemen	European	315.00	12	Firemen	European	148.80
6	Coal passers	do	210.00	9	Coal passers	do	71.37
1	Mess boy	do	20.00	1	Mess boy	do	7.93
1	Storekeeper	do	45.00	1	Storekeeper	do	
<i>Purser's department.</i>				<i>Purser's department.</i>			
1	Assistant freight clerk	European	50.00	1	Assistant freight clerk	European	24.79
1	Storekeeper	do	90.00	1	Storekeeper	do	37.19
1	Steward	do		1	Steward	do	
1	Second steward	European	40.00	1	Second steward	European	14.86
1	Steering steward	do		1	Steering steward	do	
1	Baggage steward	do		1	Baggage steward	do	7.44
1	Stewardess	European	60.00	1	Stewardess	do	32.23
1	Baker	do		1	Baker	do	7.96
1	Second baker	do		1	Second baker	do	
1	Third baker	European	40.00	1	Third baker	European	14.88
1	Butcher	do		1	Butcher	do	
1	Second butcher	do		1	Second butcher	do	
1	Porter	do		1	Porter	do	10.91
1	Second porter	do		1	Second porter	do	9.92
1	Pantry man	European	30.00	1	Pantry man	European	
1	Second pantry man	do		1	Second pantry man	do	
1	First cook, after galley	do		1	First cook, after galley	do	
1	Second cook, after galley	do		1	Second cook, after galley	do	
1	Third cook, after galley	do		1	Third cook, after galley	do	
1	First cook, forward galley	European	60.00	1	First cook, forward galley	European	32.23
1	Second cook, forward galley	do	50.00	1	Second cook, forward galley	do	14.88
1	Third cook, forward galley	do	35.00	1	Third cook, forward galley	do	14.88
1	Fourth cook, forward galley	do		1	Fourth cook, forward galley	do	

Fifth cook, forward galley.....
Sixth cook, forward galley.....

1	First cook, forward galley	30.00	1	Fifth cook, forward galley	12.39
1	Second cook, forward galley	35.00	1	Sixth cook, forward galley	8.68
1	Third cook, forward galley	35.00	1	Saloon watch	12.39
1	Fourth cook, forward galley	35.00	1	Steering watch	12.39

1	Fifth cook, forward galley	30.00	1	Fifth cook, forward galley	12.39
1	Sixth cook, forward galley	35.00	1	Sixth cook, forward galley	8.68
1	Saloon watch	35.00	1	Saloon watch	12.39
1	Steering watch	35.00	1	Steering watch	12.39
1	Barber	25.00	1	Barber	12.39
1	Stewage waiter	25.00	1	Stewage waiter	12.39
1	Officers' mess	25.00	1	Officers' mess	12.39
6	Officers' second mess	25.00	1	Officers' second mess	12.39
	Cabin waiters	20.00	8	Cabin waiters	69.41
	No. 1 waiter	120.00		No. 1 waiter	8.67
	Barkeeper			Barkeeper	
	Interpreter			Interpreter	
	Silver man			Silver man	
	Scullery man			Scullery man	
	Bath boys			Bath boys	
	Deck boys			Deck boys	
	Chow boys			Chow boys	
62	Total per month	2,905.00	82	Total per month	1,629.06
	Total per annum	34,860.00		Total per annum	19,548.96

^a United States gold.^b Equivalent in United States gold.

RECAPITULATION.

Total wages per month:	
American steamship <i>Neaport</i>	\$2,905.00
British steamship <i>Limari</i>	1,629.06
Loss per month operating under American flag, steamship <i>Neaport</i>	1,275.92
Total wages per annum:	
American steamship <i>Neaport</i>	34,860.00
British steamship <i>Limari</i>	19,548.96
Loss per annum operating under American flag, steamship <i>Neaport</i>	15,311.04

Shipments by steamers of the Pacific Mail Steamship Company from San Francisco, March 1, 1904, to March 1, 1905.

Articles.	Number of packages from—		
	San Francisco to New York and interior points beyond.	San Francisco to West Indies.	San Francisco to Europe.
Wine.....bbls..	79,233		
Asphaltum.....do..	2,769		
Wool.....bales..	3,641		
Rags and rope (old).....do..	3,897		
Hides.....do..	1,098		
Canned goods.....cases..	16,945	4,447	4,887
Oils, lubricating.....bbls..	1,183		
Lead.....tons..	6,325		
Fruit, dried.....bags..	488		3,422
Fruit, dried.....cases..	780		5,357
Bone black.....bags..	3,473		
Horns and bones.....do..	2,386		
Quicksilver.....flasks..	6,492		
Cattle hair.....bales..	693		
Beans.....bags..	3,262		

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THE PRINTED EDITION OF THIS VOLUME
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SEE FOLDOUT NO 1



(Page 107.)

Pacific Mail Steamship Co.

Pacific Mail Steamship Company—Comparative crew list, showing officers and crew, and rate of wages per month.
[American steamship, *Acapulco*, gross tonnage 2,372, versus the British steamship *Palena*, gross tonnage 2,553.]

S. Doc. 429, 59-1—22

Operated between San Francisco and Panama.				Operated between Valparaiso and San Francisco.			
No. of men.	Rating.	European or Asiatic.	Rate per man per month. ^a	No. of men.	Rating.	European or Asiatic.	Rate per man per month. ^b
<i>Schooner officers.</i>				<i>Schooner officers.</i>			
1	Captain.....	European.....	\$200.00	1	Captain.....	European.....	\$160.00
1	First officer.....	do.....	100.00	1	First officer.....	do.....	48.00
1	Chief engineer.....	do.....	150.00	1	Chief engineer.....	do.....	111.75
1	Purser.....	do.....	100.00	1	Purser.....	do.....	80.00
1	Surgeon.....	do.....	60.00	1	Surgeon.....	do.....	48.00
1	Freight clerk.....	do.....	75.00	1	Freight clerk.....	do.....	32.00
<i>Deck department.</i>				<i>Deck department.</i>			
1	Second officer.....	European.....	60.00	1	Second officer.....	European.....	40.00
1	Third officer.....	do.....	50.00	1	Third officer.....	do.....	35.20
1	Fourth officer.....	do.....	50.00	1	Fourth officer.....	do.....	21.00
1	Fifth officer.....	do.....	50.00	1	Fifth officer.....	do.....	20.71
1	Sixth officer.....	do.....	50.00	1	Sixth officer.....	do.....	20.71
1	Carpenter's mate.....	do.....	50.00	1	Carpenter's mate.....	do.....	20.71
1	Main deck watch.....	do.....	50.00	1	Main deck watch.....	do.....	20.71
1	Plumber.....	do.....	50.00	1	Plumber.....	do.....	20.71
1	Quartermasters.....	do.....	50.00	1	Quartermasters.....	do.....	20.71
1	Boatswain.....	do.....	50.00	1	Boatswain.....	do.....	20.71
1	No. 2 boatswain.....	do.....	50.00	1	No. 2 boatswain.....	do.....	20.71
1	Sailmaker.....	do.....	50.00	1	Sailmaker.....	do.....	20.71
1	Deck engineer.....	do.....	50.00	1	Deck engineer.....	do.....	20.71
1	Seamen.....	do.....	50.00	1	Seamen.....	do.....	20.71
1	Mess boy.....	do.....	50.00	1	Mess boy.....	do.....	20.71
1	Storekeeper.....	do.....	50.00	1	Storekeeper.....	do.....	20.71
<i>Engineers department.</i>				<i>Engineers department.</i>			
1	First assistant engineer.....	European.....	90.00	1	First assistant engineer.....	European.....	72.90
1	Second assistant engineer.....	do.....	80.00	1	Second assistant engineer.....	do.....	58.32
1	Third assistant engineer.....	do.....	70.00	1	Third assistant engineer.....	do.....	48.60

^a United States gold.^b Equivalent in United States gold.

Pacific Mail Steamship Company—Comparative crew list, showing officers and crew, and rate of wages per month—Continued.

Operated between San Francisco and Panama.			Operated between Valparaiso and San Francisco.		
No. of men.	Rating.	Rate per man per month.	No. of men.	Rating.	Rate per man per month.
<i>Engineers' department—Continued.</i>					
3	Junior engineers.				
	Ice engineer.				
	Electrician.				
	Water tenders.				
	Others.	\$50.00			\$13.82
	No. 1 fireman.				
	No. 2 fireman.				
	No. 3 fireman.				
9	Firemen.	45.00			11.52
9	Coal passers.	35.00			88.50
1	Mess boy.	20.00			7.37
	Storekeeper.				
					13.82
<i>Purser's department.</i>					
1	Assistant freight clerk.	50.00			13.82
1	Storekeeper.	90.00			35.20
1	Steward.	40.00			19.20
1	Second steward.				
1	Stewardess.	60.00			10.14
1	Baker.				
1	Second baker.				
1	Third baker.				
1	Butcher.	40.00			13.82
1	Second butcher.				
1	Porter.	30.00			10.14
1	Second porter.				
1	Pantry man.	60.00			9.21
1	First cook, after galley.	50.00			35.20
1	Second cook, after galley.	35.00			19.20
1	Third cook, forward galley.				12.80
1	Second cook, forward galley.				

Third cook, forward galley.

Third cook, forward galley.

	Third cook, forward galley				Third cook, forward galley				
	Fourth cook, forward galley				Fourth cook, forward galley				
	Fifth cook, forward galley				Fifth cook, forward galley				
	Sixth cook, forward galley				Sixth cook, forward galley				
1	Saloon watch	European	25 00	25 00	Saloon watch				
	Steering watch				Steering watch				
	Barber				Barber				
1	Stewage waiter	European	25 00	25 00	Stewage waiters				
1	Officers' mess	do	25 00	25 00	Officers' mess	European	7 37	29 50	
1	Officers' second mess	do			Officers' second mess	European	7 37	29 50	
6	Cabin waiters	European	20 00	120 00	Cabin waiters	do	7 90	31 61	
	No. 1 waiter				No. 1 waiter	do	11 52	11 52	
	Barkeeper				Barkeeper				
	Interpreter				Interpreter				
	Silverman				Silverman	European	7 37	7 37	
	Sculleryman				Sculleryman				
	Bath boys				Bath boys				
	Deck boys				Deck boys				
	Chow boys				Chow boys				
	Total per month.			3,060 00	Total per month				1,535 96
	Total per annum			36,720 00	Total per annum				18,430 82
96									

RECAPITULATION.

Total wages per month:		
American steamship <i>Acapulco</i>		\$3,060.00
American steamship <i>Idena</i>		1,535.86
British steamship <i>Idena</i>		
Loss per month operating under American flag, steamship <i>Acapulco</i>		1,524.14
Total wages per annum:		
American steamship <i>Acapulco</i>		36,720.00
American steamship <i>Idena</i>		18,430.32
British steamship <i>Idena</i>		
Loss per annum operating under American flag, steamship <i>Acapulco</i>		18,289.68

(Page 109.)

Pacific Mail Steamship Company—Comparative crew list, showing officers and crew, and rate of wages per month.[American steamship *City of Sydney*, gross tonnage 3,017, versus the Chilean steamship *Aconcagua*, gross tonnage 2,761.]

Operating between San Francisco and Panama.				Operating between Valparaiso and Ocosingo.			
No. of men.	Rating.	European or Asiatic.	Rate per man per month. ^a	No. of men.	Rating.	European or Asiatic.	Rate per man per month. ^b
<i>Saloon officers.</i>				<i>Saloon officers.</i>			
1	Captain.....	European.....	\$200.30	1	Captain.....	European.....	\$112.00
1	First officer.....	do.....	100.00	1	First officer.....	do.....	35.20
1	Chief engineer.....	do.....	150.00	1	Chief engineer.....	do.....	121.00
1	Purser.....	do.....	100.00	1	Purser.....	do.....	57.60
1	Surgeon.....	do.....	60.00	1	Surgeon.....	do.....	19.20
1	Freight clerk.....	do.....	75.00	1	Freight clerk.....	do.....	.....
<i>Deck department.</i>				<i>Deck department.</i>			
1	Second officer.....	European.....	60.00	1	Second officer.....	European.....	32.00
1	Third officer.....	do.....	50.00	1	Third officer.....	do.....	24.00
1	Fourth officer.....	do.....	.....	1	Fourth officer.....	do.....	19.20
1	Fifth officer.....	do.....	.....	1	Fifth officer.....	do.....	14.40
1	Sixth officer.....	do.....	.....	1	Sixth officer.....	do.....	.....
1	Carpenter.....	European.....	50.00	1	Carpenter.....	do.....	.....
1	Carpenter's mate.....	do.....	.....	1	Carpenter's mate.....	do.....	.....
1	Main-deck watch.....	do.....	.....	1	Main-deck watch.....	do.....	.....
1	Plumber.....	do.....	.....	1	Plumber.....	do.....	.....
1	Quartermasters.....	European.....	140.00	1	Quartermasters.....	European.....	25.60
1	Boatswain.....	do.....	35.00	1	Boatswain.....	do.....	9.60
1	No. 2 boatswain.....	do.....	.....	1	No. 2 boatswain.....	do.....	.....
1	Salmoner.....	do.....	.....	1	Salmoner.....	do.....	.....
1	Deck engineer.....	European.....	30.00	1	Deck engineer.....	European.....	5.76
1	Boys.....	do.....	20.00	1	Boys.....	do.....	5.12
1	Storekeeper.....	do.....	.....	1	Storekeeper.....	do.....	.....
1	Winchmen.....	do.....	.....	1	Winchmen.....	do.....	4.48
<i>Engineers' department.</i>				<i>Engineers' department.</i>			
1	First assistant engineer.....	European.....	90.00	1	First assistant engineer.....	European.....	72.00
1	Second assistant engineer.....	do.....	80.00	1	Second assistant engineer.....	do.....	56.00
1	Third assistant engineer.....	do.....	70.00	1	Third assistant engineer.....	do.....	46.40
1	Junior engineer.....	do.....	.....	1	Junior engineer.....	do.....	.....
1	Ice engineer.....	do.....	.....	1	Ice engineer.....	do.....	.....
1	Electrician.....	do.....	.....	1	Electrician.....	do.....	.....

REPORT OF JOSEPH L. BRISTOW.

841

Water tenders		European		Water tenders		European	
3	3	165.00	55.00	3	3	165.00	55.00
Oilers	Oilers	135.00	45.00	Oilers	Oilers	135.00	45.00
No. 1 fireman	No. 1 fireman			No. 1 fireman	No. 1 fireman		
No. 2 fireman	No. 2 fireman			No. 2 fireman	No. 2 fireman		
No. 3 fireman	No. 3 fireman			No. 3 fireman	No. 3 fireman		
Firemen	Firemen	405.00	45.00	Firemen	Firemen	405.00	45.00
Coal passers	Coal passers	315.00	35.00	Coal passers	Coal passers	315.00	35.00
Mess boy	Mess boy	21.00		Mess boy	Mess boy	21.00	
Storekeeper	Storekeeper			Storekeeper	Storekeeper		
1	1			1	1		
Donkeyman	Donkeyman			Donkeyman	Donkeyman		
1	1			1	1		
<i>Purser's department.</i>				<i>Purser's department.</i>			
Assistant freight clerk	Assistant freight clerk			Assistant freight clerk	Assistant freight clerk		
1	1			1	1		
Storekeeper	Storekeeper	50.00		Storekeeper	Storekeeper	50.00	
1	1	90.00		1	1	90.00	
Steward	Steward			Steward	Steward		
1	1			1	1		
Second steward	Second steward	40.00		Second steward	Second steward	40.00	
1	1			1	1		
Steering steward	Steering steward			Steering steward	Steering steward		
1	1			1	1		
Baggage steward	Baggage steward			Baggage steward	Baggage steward		
1	1			1	1		
Stewardess	Stewardess			Stewardess	Stewardess		
1	1			1	1		
Baker	Baker	60.00		Baker	Baker	60.00	
1	1			1	1		
Second baker	Second baker			Second baker	Second baker		
1	1			1	1		
Third baker	Third baker	40.00		Third baker	Third baker	40.00	
1	1			1	1		
Butcher	Butcher			Butcher	Butcher		
1	1			1	1		
Second butcher	Second butcher			Second butcher	Second butcher		
1	1			1	1		
Porter	Porter			Porter	Porter		
1	1			1	1		
Second porter	Second porter	30.00		Second porter	Second porter	30.00	
1	1			1	1		
Pantryman	Pantryman			Pantryman	Pantryman		
1	1			1	1		
First cook, after galley	First cook, after galley			First cook, after galley	First cook, after galley		
1	1			1	1		
Second cook, after galley	Second cook, after galley			Second cook, after galley	Second cook, after galley		
1	1			1	1		
Third cook, after galley	Third cook, after galley	69.6		Third cook, after galley	Third cook, after galley	69.6	
1	1			1	1		
First cook, forward galley	First cook, forward galley	50.00		First cook, forward galley	First cook, forward galley	50.00	
1	1			1	1		
Second cook, forward galley	Second cook, forward galley	35.00		Second cook, forward galley	Second cook, forward galley	35.00	
1	1			1	1		
Third cook, forward galley	Third cook, forward galley			Third cook, forward galley	Third cook, forward galley		
1	1			1	1		
Fourth cook, forward galley	Fourth cook, forward galley			Fourth cook, forward galley	Fourth cook, forward galley		
1	1			1	1		
Fifth cook, forward galley	Fifth cook, forward galley			Fifth cook, forward galley	Fifth cook, forward galley		
1	1			1	1		
Sixth cook, forward galley	Sixth cook, forward galley			Sixth cook, forward galley	Sixth cook, forward galley		
1	1			1	1		
Saloon watch	Saloon watch	25.00		Saloon watch	Saloon watch	25.00	
1	1			1	1		
Steering watch	Steering watch			Steering watch	Steering watch		
1	1			1	1		
Barber	Barber			Barber	Barber		
1	1			1	1		
Steering waiter	Steering waiter	25.00		Steering waiter	Steering waiter	25.00	
1	1			1	1		
Officers' messenger	Officers' messenger	25.00		Officers' messenger	Officers' messenger	25.00	
1	1			1	1		
Officers' second messenger	Officers' second messenger			Officers' second messenger	Officers' second messenger		
1	1			1	1		
Cabin waiters	Cabin waiters	20.00		Cabin waiters	Cabin waiters	20.00	
7	7			7	7		
No. 1 waiter	No. 1 waiter	140.00		No. 1 waiter	No. 1 waiter	140.00	
1	1			1	1		

^a United States gold.^b Equivalent in United States gold.

Pacific Mail Steamship Company—Comparative crew list, showing officers and crew, and rate of wages per month—Continued.

Operating between San Francisco and Panama.				Operating between Valparaiso and Ocosingo.			
No. of men.	Rating.	European or Asiatic.	Rate per man per month.	No. of men.	Rating.	European or Asiatic.	Rate per man per month.
<i>Purser's department—Continued.</i>				<i>Purser's department—Continued.</i>			
	Barkeeper.....			1	Barkeeper.....	European	\$3.00
	Interpreter.....			1	Baggage-man.....	do.	6.40
	Silverman.....			1	Knifeman.....	do.	5.12
	Scullyman.....				Sculleryman.....		
	Bath boys.....				Deck boys.....		
	Deck boys.....				Chow boys.....		
	Chow boys.....			1	Captain's boy.....	European	5.12
	Total per month.....		\$3,230.00		Total per month.....		1,048.88
70	Total per annum.....		38,760.00	72	Total per annum.....		12,586.56

RECAPITULATION.

Total wages per month:		
American steamship <i>City of Sydney</i>	\$3,230.00	
Chilean steamship <i>Aconcagua</i>	1,048.88	
Loss per month operating under American flag, steamship <i>City of Sydney</i>	2,181.12	
Total wages per annum:		
American steamship, <i>City of Sydney</i>	38,760.00	
Chilean steamship <i>Aconcagua</i>	12,586.56	
Loss per annum operating under American flag, steamship <i>City of Sydney</i>	26,173.44	

Pacific Mail Steamship Company—Comparative crew list, showing officers and crew, and rate of wages per month.

Aztec (Pacific Mail Steamship Company) operated between San Francisco and Panama.				Ramsey (Kosmos Line) operated between Hamburg and San Francisco.			
No. of men.	Rating.	European or Asiatic.	Rate per man per month. ^a	No. of men.	Rating.	European or Asiatic.	Rate per man per month. ^b
<i>Saloon officers.</i>				<i>Saloon officers.</i>			
1	First officer.....	European	\$100.00	1	Captain.....	European	\$125.00
1	Captain.....	do.	200.00	1	First officer.....	do.	65.00
1	Chief engineer.....	do.	150.00	1	Chief engineer.....	do.	82.50
	Purser.....				Purser.....		
	Surgeon.....				Surgeon.....		
1	Freight clerk.....		75.00		Freight clerk.....		
<i>Deck department.</i>				<i>Deck department.</i>			
1	Second officer.....	European	60.00	1	Second officer.....	European	42.50
1	Third officer.....	do.	50.00		Third officer.....	do.	32.50
	Fourth officer.....				Fourth officer.....		
	Fifth officer.....				Fifth officer.....		
1	Sixth officer.....	European	50.00		Sixth officer.....	European	21.25
	Carpenter.....				Carpenter.....		
	Carpenter's mate.....				Carpenter's mate.....		
	Main deck watch.....				Main deck watch.....		
	Plumber.....				Plumber.....		
4	Quartermasters.....	European	85.00		Quartermaster.....		
1	Boatswain.....	do.	35.00		Boatswain.....	European	21.25
	No. 2 boatswain.....				No. 2 boatswain.....		
	Sailmaker.....				Sailmaker.....		
3	Deck engineer.....	European	30.00		Deck engineer.....	European	16.25
	Seamen.....				Seamen.....		
	Mess boys.....				Mess boys.....		
	Storekeeper.....				Storekeeper.....		
<i>Engineers' department.</i>				<i>Engineers' department.</i>			
1	First assistant engineer.....	European	90.00	1	First assistant engineer.....	European	50.00
1	Second assistant engineer.....	do.	80.00	1	Second assistant engineer.....	do.	37.50
1	Third assistant engineer.....	do.	70.00		Third assistant engineer.....		
	Junior engineers.....				Junior engineers.....		
	Ice engineer.....				Ice engineer.....		

^a United States gold.^b Equivalent in United States gold.

Pacific Mail Steamship Company—Comparative crew list, showing officers and crew, and rate of wages per month—Continued.

Antec (Pacific Mail Steamship Company) operated between San Francisco and Panama.				Ramaes (Kosmos Line) operated between Hamburg and San Francisco.			
No. of men.	Rating.	Rate per man per month.	Amount of pay per month.	No. of men.	Rating.	Rate per man per month.	Amount of pay per month.
<i>Engineers' department—Continued.</i>				<i>Engineers' department—Continued.</i>			
3	Electrician			Electrician			
	Water tenders			Water tenders			
	Oilers			Oilers			
6	No. 1 fireman	\$50.00	\$150.00	No. 1 fireman	European	\$18.75	\$57.50
	No. 2 fireman			No. 2 fireman			
	No. 3 fireman			No. 3 fireman			
6	Firemen	45.00	270.00	Firemen	European	16.25	97.50
	Coal passers	35.00	210.00	Coal passers	do	16.25	48.75
	Mess boys			Mess boys			
	Storekeeper			Storekeeper			
<i>Purser's department.</i>				<i>Purser's department.</i>			
1	Assistant freight clerk		60.00	Assistant freight clerk			
1	Storekeeper		75.00	Storekeeper			
	Steward			Steward			
	Second steward			Second steward			
	Steering steward			Steering steward			
	Baggage steward			Baggage steward			
	Stewards			Stewards			
	Baker			Baker			
	Second baker			Second baker			
	Third baker			Third baker			
	Butcher			Butcher			
	Second butcher			Second butcher			
	Porter			Porter			
	Second porter			Second porter			
	Pantryman			Pantryman			
	Second pantryman			Second pantryman			
	First cook and baker		60.00	First cook, after galley	European		25.00
	Second cook and baker		40.00	Second cook, after galley	do		17.50
	Third cook, after galley		25.00	Third cook, after galley	do		8.75
	First cook, forward galley			First cook, forward galley			
	Second cook, forward galley			Second cook, forward galley			
	Third cook, forward galley			Third cook, forward galley			
	Fourth cook, forward galley			Fourth cook, forward galley			
	Fifth cook, forward galley			Fifth cook, forward galley			
	Sixth cook, forward galley			Sixth cook, forward galley			
	Saloon watch			Saloon watch			

Steering watch
Barber

Steering watch.		Steering watch.	
Barber		Barber	
Steering waiters		Steering waiters	
Officers' mess	25 00	Officers' mess	
Officers' second mess	20 00	Officers' second mess	
Cabin waiter	20 00	Cabin waiter	
No. 1 waiter	2	No. 1 waiter	1 75
Barkeeper		Barkeeper	7 50
Interpreter		Interpreter	
Silverman		Silverman	
Sculleryman		Sculleryman	
Bath boys		Bath boys	
Deck boys		Deck boys	
Chow boys		Chow boys	
Total per month	2 155 00	Total per month	873 75
Total per annum	25 860 00	Total per annum	10 545 00
41			

RECAPITULATION.

Total wages per month:	
American steamship <i>Atlee</i> (Pacific Mail Steamship Company)	\$2 155 00
German steamship <i>Romms</i> (Kosmos Line)	578 75
Loss per month operating under American flag, steamship <i>Atlee</i>	1 276 25
Total wages per annum:	
American steamship <i>Atlee</i> (Pacific Mail Steamship Company)	25 860 00
German steamship <i>Romms</i> (Kosmos Line)	10 545 00
Loss per annum operating under American flag, steamship <i>Atlee</i>	15 315 00

Statement showing rate of wages paid out of the port of San Francisco—Steamers.

Rating.	Pacific Coast Steamship Company, City of Puebla, 2,624 tons, operating San Francisco and Victoria.		American-Hawaiian Steamship Company, Texan, 8,615 tons, operating San Francisco and New York.		Pacific Coast Steamship Company, Umatilla, 3,070 tons, operating San Francisco and Victoria.	
	No.	Rate per month.	No.	Rate per month.	No.	Rate per month.
Captain.....	1	\$200.00	1	\$200.00	1	\$200.00
First officer.....	1	90.00	1	80.00	1	90.00
Chief engineer.....	1	150.00	1	150.00	1	150.00
Purser.....	1	90.00			1	90.00
First clerk.....	1	70.00			1	70.00
Second clerk.....	1	60.00			1	60.00
Second officer.....	1	75.00	1	55.00	1	75.00
Third officer.....	1	60.00	1	40.00	1	60.00
Fourth officer.....	1	55.00			1	55.00
Carpenter.....	1	50.00	1	40.00	1	50.00
Main-deck watchman.....	1	45.00			1	45.00
Quartermasters.....	4	180.00	2	60.00	4	180.00
Seamen.....	12	540.00	8	200.00	12	360.00
Boatswain.....	1	50.00	1	30.00	1	50.00
Deck boys.....	2	50.00			2	50.00
First assistant engineer.....	1	90.00	1	90.00	1	90.00
Second assistant engineer.....	1	75.00	1	80.00	1	75.00
Third assistant engineer.....	1	70.00	1	70.00	1	70.00
Water tenders.....	2	110.00	3	135.00	2	110.00
Oilers.....	2	80.00	6	270.00	2	80.00
Firemen.....	9	450.00	12	420.00	9	450.00
Coal passers.....	9	360.00	6	150.00	6	240.00
Steward.....	1	90.00	1	60.00	1	90.00
Second steward.....	1	50.00			1	50.00
Steering steward.....	1	40.00			1	40.00
Stewardess.....	1	25.00			1	25.00
Baker.....	1	75.00			1	75.00
Second baker.....	1	30.00			1	30.00
Porter.....	1	30.00			1	30.00
Barkeeper.....	1	40.00			1	40.00
First pantryman.....	1	40.00	1	35.00	1	40.00
Second pantryman.....	1	25.00			1	25.00
Chief cook.....	1	75.00	1	50.00	1	75.00
Second cook.....	1	50.00	1	40.00	1	50.00
Third cook.....	1	40.00			1	40.00
Fourth cook.....	1	30.00			1	30.00
Mess man.....	1	30.00	1	35.00	1	30.00
Mess boy.....	2	50.00	1	15.00	2	50.00
Waiters.....	6	180.00			6	180.00
Do.....	9	225.00			10	250.00
Bell boy.....	1	15.00			1	15.00
Sculleryman.....						
Total.....	88	4,140.00	53	2,305.00	86	3,865.00

Wages paid by the Pacific Steam Navigation Company on the steamer "Manavi."

Captain.....	per annum.....	\$250 0 0
Captain (safe nav. money).....	do.....	120 0 0
Captain (wine money).....	per day.....	4 0
First officer (senior second acting chief officer).....	per month.....	18 0 0
Second officer (senior third acting second).....	do.....	8 0 0
Boatswain (boatswain stands third officer's watch).....	soles month.....	\$45.00
Carpenter.....	do.....	55.00
Four quartermasters, each.....	do.....	20.00
Two winch boys, each.....	do.....	14.00
Twelve seamen, each.....	do.....	22.00
Purser.....	per month.....	\$10 0 0
Purser clerk.....	do.....	6 0 0
Chief steward.....	do.....	12 0 0
Pantryman.....	soles month.....	\$26.00
Seven servants, each.....	do.....	19.00
First cook.....	do.....	60.00
Second cook.....	do.....	50.00
Chief engineer (first assistant acting chief).....	per month.....	\$19 0 0
Second engineer (third assistant acting second).....	do.....	12 0 0
Third engineer (donkeyman stands the watch).....	do.....	7 0 0
Six firemen, each.....	soles month.....	\$30.00
Four trimmers, each.....	do.....	18.00
All boys.....	do.....	19.00

P. S.—Dollars are Chilean currency, which, at the ruling rate of exchange, are worth 40 cents United States gold.

Extracts from statement of R. P. Schwerin before the Merchant Marine Commission.

The Senator asked me a little while ago about the cost of construction in the American shipyard. The American shipyard is not a cheap shipyard to build in. This is not because the American builder is not just as desirous to work as economically here as they do abroad, but because he can not. Labor enters very largely in the item of cost of construction of a ship. Raw material is a secondary consideration, but the labor outside of the shipyard that fashions the raw material into plates and shapes the other accessories that go toward the completion of this most complicated fabric has all got to be reckoned with in the final cost of construction. The labor will amount to at least 75 per cent of the cost; the material should not exceed more than 25 per cent.

As to the comparative cost of work in the shipyards of this country versus those abroad, I would call your attention to the case of one of our ships which was unfortunate enough a short time ago to go on the beach off Point Bonita coming into the harbor of San Francisco, and received serious damage. Foreign underwriters have claimed that this is an unfair port in that its shipyards take advantage of marine disasters to make the underwriters pay dearly for the cost of repairs. They have complained that when work was done for their account they have been compelled to pay more for it than a shipping firm would have had to pay. In this case they asked me to obtain tenders from all of the shipyards on the Pacific coast, and I complied with their request. We received bids from Victoria, Puget Sound, and San Francisco. The highest bid was from San Francisco, amounting to about \$108,000, and the lowest bid was from Victoria, about \$42,000, and this would show that they had some reason for complaining.

Representative HUMPHREY. What was the first?

Mr. SCHWERIN. \$108,000 in San Francisco. The lowest bid in San Francisco was about \$93,000. I learned that the British naval authorities, in order to obtain that job for Victoria, offered the use of the naval dry dock at Esquimalt for about \$6,000, whereas the dockage at this port of the same ship was over \$35,000. By getting the San Francisco people interested in this particular class of work together, and showing them what it meant to this port if the work went away, the lowest bid from San Francisco was modified so that the cost was fixed at about what the cost would be in Victoria plus the cost of taking the ship from San Francisco to Victoria and returning her to this port. I do not suppose that the job was taken here at a loss.

As we can not get our ships built cheaply in America, we are not only compelled to pay the large first cost, but from the very day the first payment is due at the signing of the contract, the interest account commences and runs along until the final delivery of, and payment for, the ship. If you are building a vessel costing \$2,000,000, covering a period of two or three years, you will have a large interest account to add to the first cost. If you can build such a ship in England for \$1,200,000, you will save not only \$800,000 in the first cost, but a very large interest account, which must be considered in the final cost of that ship; and when the final cost is less you can arrange for a smaller depreciation charge per annum, a smaller amount for underwriting, and obtain a larger gross revenue on the capital invested on the British-built ship over the American-built ship.

The CHAIRMAN. I asked you the question as to the comparative cost of building ships here and abroad for the reason that we have had a great discrepancy of testimony on that point. I think it is safe for me to say that it has ranged from 35 per cent to 60 and 65 per cent. The Commission is very desirous, if it is possible, to get approximately the difference in cost. We do not expect that it can be given accurately, but approximately. For that reason I asked you the question.

Mr. SCHWERIN. Senator, I have been in the British market for the last five years, from time to time, as to the cost of building ships there, in order to get a comparative idea as to what it would cost us to obtain British vessels, as we have considered putting our present American fleet under the British flag, and also obtain additional vessels in the British market, for at times we grew tired of the interference with the operation of our vessels in this port by labor agitators and misguided people who felt that they understood how we should conduct our business, and attempted to influence legislation accordingly. I am operating a company, called the Occidental and Oriental Steamship Company, of British vessels belonging to the White Star Company of Liverpool, England,

and I find we get along much more easily under the British flag than under the American flag. We have no labor troubles on these ships and we are not continually pestered by labor agitators and their influence upon the Federal departments.

To go back to the cost of the ships. The *Peru* was built by the Union Iron Works in San Francisco and about the same time we were building the *China* in England. The *Peru* cost about \$650,000, the *China* about \$700,000. There is no comparison in the intrinsic value of these ships in the sea-carrying trade, either in earning capacity or in economy or as a favorite with the traveling public. The *China* is immeasurably the superior ship, and I should say of three times the value to the Pacific Mail Steamship Company that the *Peru* is. This is not the fault of the Union Iron Works. They built the ship as called for by the managers of the Pacific Mail Steamship Company at that time, and the fault lies with the people who designed and compelled the Union Iron Works to build in the nineteenth century what might be called a sixteenth century ship. If the *Peru* had been designed in all respects similar to the *China*, she would have cost in this country, at that time, not less than \$1,100,000.

When the construction of the *Korea* and *Siberia* was under discussion, we had bids from three large shipyards in Great Britain and from the Union Iron Works and the Newport News Shipbuilding and Dry Dock Company, in this country. The design at that time called for ships 525 feet between perpendiculars. This was in 1895. The lowest bid we had in England for these ships was \$800,000. The highest was \$1,200,000. The Union Iron Works bid was \$1,350,000. The Newport News Shipbuilding and Dry Dock Company was \$3,563,000 for both. We afterwards changed the dimensions from 525 feet between perpendiculars to 550 feet and 570 over all, and increased the speed, and the contract was arranged with the Newport News Shipbuilding and Dry Dock Company to construct the ships to cost not to exceed a specified upset price. With extras and interest account these ships stand on our books at \$3,838,057.99, or \$1,919,028.99 each.

The CHAIRMAN. Allow me to ask just one more question. Do I understand you to say that the lowest responsible bid in England was \$800,000?

Mr. SCHWERIN. Yes, sir.

The CHAIRMAN. And the bid of the Union Iron Works \$1,350,000?

Mr. SCHWERIN. The best bid in England was \$1,200,000.

The CHAIRMAN. You say the best bid. You mean the highest bid?

Mr. SCHWERIN. Yes, sir. The specifications called for a high type passenger steamer, and while one firm bid \$800,000, and they had a good reputation for building ships, this firm had never tackled such a large and high-class passenger ship and perhaps had underbid the higher bidder, who were people thoroughly experienced in this class of construction. It is a well-known fact that yards in different parts of England and Scotland very materially underbid each other, and that this is very manifest in those yards that have a great deal of what is called special work. The yard that devotes itself entirely to the construction of high-class Government cruisers and battle ships can not take a contract on a tramp steamer as cheaply as a yard that devotes itself entirely to that construction, and the vice versa holds good. The firm whose bid was \$1,200,000 said that if we entered into negotiations for the construction of the ships, they would be able to name a better figure, but they did not like to give a detailed price to close on unless they might consider the proposition as actual business, and we consider that their letter implied that the price would have materially shaded had we agreed to enter into actual negotiations for the ships, and not merely asked them to name a price on the general specifications of the ships. Therefore it is hardly fair to this builder to compare his figures with the figures which the Union Iron Works gave, but for comparative purposes it gives generally what you wish to ascertain.

The CHAIRMAN. I wish to ask one question further to illustrate this point, because I think it is of some consequence. That was in 1895?

Mr. SCHWERIN. Yes, sir.

The CHAIRMAN. Would the difference be greater to-day than it was nine years ago?

Mr. SCHWERIN. I was going to state that I believe there have been two changes in the maximum cost of construction in Great Britain since that period—that is, the cost of construction has gone down, then up, and is now going down again, while since that time the cost of labor, shapes, and plates in this country has steadily advanced and labor gives even less results for the higher wages

paid. The most advantageous construction deal ever made in this country for ships was in the building of the vessels for the American-Hawaiian Line. The shipyards were verging on a shut down, and they took this work practically at cost to hold their men and property together. Those ships were the cheapest and the best for the money ever built in the world.

It is doubtful if to-day you could get a good shipbuilder to duplicate them at anywhere near the same cost. In fact, the builders of these ships have told me that they lost money in their construction.

When the *Mongolia* and *Manchuria* were contracted for in this country, two ships identically the same were also laid down in Great Britain, covered by identical specifications. I understand there was a difference of some \$800,000 in favor of the English builder.

The CHAIRMAN. What was the aggregate cost?

Mr. SCHWERIN. The contract price for these ships was \$1,850,000 each.

Representative HUMPHREY. That was a difference of \$800,000 in the cost of the two?

Mr. SCHWERIN. A difference of \$800,000 for the two, or \$400,000 each.

The CHAIRMAN. The British bid was \$800,000 less?

Mr. SCHWERIN. Yes, sir; for the two.

Regarding the construction of tramp steamers, we paid \$300,000 for the *Algon*. We tried to get her duplicated abroad and they offered to do it for \$452,000. That was in 1900. We obtained figures in this country for the building of two ships of this type and the cost was \$625,000 apiece, or \$1,250,000 for the two. She is a good type of a great cargo capacity carrier, for she has actually carried 11,500 tons of dead weight cargo from ports on Puget Sound to ports of the United Kingdom; this in addition to her fuel.

Representative HUMPHREY. There is, then, more difference in the cost of constructing a tramp steamer here and in England than in the construction of ships of the type of the *Manchuria*?

Mr. SCHWERIN. No; I don't believe that that follows. There could hardly be any comparison made as you suggest. Each type must be compared separately in order to obtain the comparative cost here and abroad. Ships might cost more in England than they do in this country for this reason. If the English yards are hungry for work, you can make almost any kind of a deal with them. If the American yards are hungry for work the same thing follows; and if the English yards are full of work at a time when the American yards are hungry for work and delivery could not be guaranteed, then considering the period of delivery and the interest account, the ships might be laid down here for less than in England, though I am considering an extreme case. For instance, if a British shipyard is full of work, and I want to build a ship worth, say, \$250,000, the probabilities are that the builders would not look at me for less than \$300,000, but if the English yard were hungry for work and at the same time the American yard was hungry for work, the American yard would probably take the ship for \$225,000. You will find that this condition will prevail in all of the shipyards the world over. It prevailed here when the American-Hawaiian ships were built, and I doubt if they could have been built and delivered at that time in England at the price paid and within the delivery period called for.

The price of material that goes into a ship is the small end of the constructive cost. It is the cost of operating the plant and the cost of labor that must be mainly considered. Labor, however, is the main item of expense which tends toward high cost of construction, and as we have the highest-priced labor in the world in this country in ship construction, we must pay the highest price for our ships except under the abnormal conditions stated.

Furthermore, the following conditions have and will hurt us in ship construction. It may be considered a personal criticism, but I believe it is true—the Government has carried its specifications for the Government work to such an elastic limit and its inspections to such a high degree, and as most of the important ship construction in this country in our shipyards has been on naval work, the builder and workmen have been trained to produce a finished fabric very much finer and very much more costly than is absolutely required in the mercantile service. The shipyard draftsmen and designers are almost solely trained in the detail of this naval construction, and in consequence when we go to them to have specifications and bids prepared or to have repair work done, they begin to figure on mercantile work as though it was intended for the Government under Government specifications and inspection. And in consequence the work produced or estimated upon is much better than we ought to

have, and yet the ship or the work upon the ship which we want to have performed is to compete with those built abroad, which are in all respects amply able to meet all requirements, although constructed and repaired with much less labor and therefore at less cost. For instance, we previously made many of our repairs in Hongkong, China. We could do it as well in Hongkong as in San Francisco, and it cost us from 50 to 60 per cent less. The cost of labor in Hongkong has materially risen since the American-Spanish war, and the difference in cost of repairs is now about 30 to 40 per cent. We are now doing the most of our repair work in San Francisco, and this is not alone on patriotic grounds but is influenced to great extent by the following facts: When we built the *Mon-golia* and *Manchuria* there was no dry dock tributary to the Pacific Ocean where we could dock these ships. We required a dry dock over 600 feet long. The San Francisco Dry Dock Company agreed if we would give them all the dockage of our fleet they would build a new dock in San Francisco, and they have since completed one over 700 feet long. This was agreed to and we have placed our work here. Still it remains true that we can dock and paint and repair our ships in Hongkong from 30 to 40 per cent less than it costs here, and on painting the ship's bottom we really get a better job there than here, for it seems that a Chinese workman there will put up a more conscientious class of work than the American workman here.

The Pacific Mail Steamship Company is an American institution, one of the oldest in the foreign sea trade of the world, and it is still patriotic in its ideas and policies, and it is with pleasure it states that so large a portion of its work is done in American yards. This may seem somewhat inconsistent with the fact that we carry Chinese crews, but we are compelled to carry these crews in the Trans-Pacific trade because competition compels us to carry them, and if we did not, we would be unable to operate this branch of our service. Bear in mind, however, that a portion of the saving due to the carrying of Chinese crews go to the American shipyard in repairing these ships. The figures I have presented here to-day show conclusively our inability to operate unless we use the Chinese crews, and if we did not operate the American shipyards would not get the work we are now giving them, as we would be forced out of business, as the American ship in this trade could easily be replaced by a foreign one which would certainly have its work and repairs done abroad. In view of this it might be interesting to state the earnings of the Pacific Mail Steamship Company at the close of the fiscal year 1904.

The CHAIRMAN. Please state it so that it may go into the record.

Mr. SCHWERIN. Our net earnings were \$246,895.60.

The CHAIRMAN. Before you come to that, the two illustrations you gave show that it would cost about 45 per cent more to build ships in this country than abroad.

Mr. SCHWERIN. I don't think so. In one case, yes. I have figured it out in a number of cases, and it varies generally from 20 to 35 per cent.

The CHAIRMAN. Have you given any consideration to the so-called Livermash bill which was introduced in Congress at the last session?

Mr. SCHWERIN. No, sir.

EXHIBIT L 1.

Letter of Mr. Schwerin, inclosing one from Mr. F. Pearne, agent of the Pacific Mail Steamship Company at Panama.

SAN FRANCISCO, CAL., April 27, 1905.

Hon. J. L. BRISTOW,

Special Panama Railroad Commissioner, Washington, D. C.

DEAR MR. BRISTOW: In order that you may know the difficulties we have to contend with on the Isthmus on account of the inadequate facilities of the Panama Railroad Company for transporting cargo across the Isthmus, inclose you herewith a copy of a letter received from our agent at Panama, Mr. F. Pearne, under date of April 1, 1/1446.

Yours, truly,

R. P. SCHWERIN,
Vice-President and General Manager.

Subjects: Dispatch of steamers at Panama.

1/1446.

PACIFIC MAIL STEAMSHIP COMPANY,
Panama Agency, April 1, 1905.

R. P. SCHWERIN, Esq.,
Vice-President and General Manager Pacific Mail Steamship Company,
San Francisco.

DEAR SIR: Referring to your letter of 2d ultimo, No. PM 77:

Beg to say that my letter No. 1/1426 of 25/2/05 covers the subject-matter pretty well. As before stated, the bunching of the extra ships here, and the late arrival of *City of Para*, V. 40, were two of the principal causes of the difficulties here. A similar bunching of the extras has occurred again. The extra steamship *Newport*, V. 2 C. A., arrived at Ancon March 16; the through steamship *Costa Rica*, March 14; *C/O Peking*, March 22; *Aztec*, March 23; *San Jose*, March 30; *San Mateo*, April 1, and the *Barracouta*, March 13. With so many steamers coming in so near together, and taking into consideration the south boats, Panama Railroad Company, with its facilities and material on hand, have done very well to keep the cargo moving and not get entirely blocked. Their La Boca pier handicaps matters in handling cargo, for it is not long enough and too narrow. It has been a failure ever since operations began on it seven years ago. Panama Railroad Company has lately been showing preference to us in the use of the pier; in fact, we have almost monopolized it, as we have worked the following steamers there:

Barracouta, V. 88 C. A., in; *C/O Sydney*, V. 81; *Newport*, V. 39, up; *Costa Rica*, V. 7; *C/O Peking*, V. 7; *Aztec*, V. 8 S/F.; *San Jose*, V. 109.

Again, as before stated, if *Para*, 40, had not been so late the difficulties experienced would not have been so great, for four or five days prior to arrival of *Para* there were two vacant berths at pier.

It is also to be noted that the laborers are doing 20 per cent less work than last year. They move around as though half dead. This makes overtime and extra work for the checkers.

Also beg to repeat that the equipment of Panama Railroad is responsible likewise for the difficulties. They have not enough cars. Panama Railroad made no provisions at all for the increased volume of business which the canal would bring.

I understand that an entire new equipment of rolling stock has been ordered for the Panama Railroad.

Colon is in the same predicament as Panama, viz, insufficient wharf facilities. Steamship *City of Washington*, from New York, arrived Thursday last, and her discharge only commenced yesterday. C. G. T. steamship *Versailles* arrived 30th ultimo, and she is not yet docked.

Panama Railroad Company has nine cargo launches. If there should be, as has been the case during the past week, two Pacific Mail steamships at dock and a Compania Sud-Americana de Vapores ship also in port, Panama Railroad could not handle more than the three ships at a time; but if it should happen to be a Pacific Steam Navigation boat in port instead, then they could handle one more ship, for the reason that the Pacific Steam Navigation Company has its own launches. During the past week the Compania Sud-Americana de Vapores steamship *Tucapel* was in port. *Aztec* and *San Jose* were worked at pier, and *Tucapel* by launches down bay. *Tucapel* sailed on April 1, date of arrival of the *San Mateo*, and Panama Railroad Company were ready to send the same men they had working on *Tucapel* over to *San Mateo*, but the men refused to go over at the time, which caused a little delay.

Yours, faithfully,

(Signed) F. PEARNE, Agent.

EXHIBIT L 2.

Copies of letters from S. Sandberg, captain of the Pacific Mail steamship "City of Panama," and George W. Brown, captain of the Pacific Mail steamship "City of Para."

STEAMSHIP "CITY OF PANAMA," VOY. 54, AT
San Francisco, May 27, 1905.

R. P. SCHWERTIN, Esq.,
Vice-President and General Manager
Pacific Mail Steamship Company, City.

DEAR SIR: Referring to the conversation of yesterday relative to condition on the Isthmus of Panama and your request that I submit a report of same, so far as my observations went, I beg to submit the following:

As regards discharging and loading of the *City of Panama* at Ancon, I would respectfully report that I arrived at Ancon on April 18 at 8.30 a. m., having on board 1,308 tons; at 1.30 p. m., same date, I was tied up at La Boca pier, ready to discharge, but found that the railroad company had no empty cars to receive my cargo or any men to handle same.

At 2.30 p. m., same date, the electric cranes used on the *City of Para* were disabled, so they sent the gang from that ship to begin taking out our deck cargo and some of the rubber that I had locked up in the women's steerage.

At 4.30 p. m. the gang were taken back, as the cranes were again in order, so all work on my vessel was suspended for the day.

On April 19, 9 a. m., renewed work on cargo aft; 10 a. m., suspended work, as they were unable to receive any more cargo on dock, having no empty cars.

In this connection I would respectfully submit herewith a detailed report that I had the chief officer write me, fully covering the way work was carried on during our stay at La Boca pier.

Sunday, April 23, made a trip to Colon, and en route noticed a number of flat cars loaded with coal and side-tracked at the various sidings; this being for the use of Canal Commission; also a large number of box cars filled with supplies and materials for the canal awaiting unloading. While at Colon visited the Panama Railroad Company wharf and found same completely choked and blocked with cargo destined for Pacific side of Isthmus, no apparent attempt being made to pile or sort same; in fact, found no pile any higher than my head. Should judge if the amount of freight I saw was properly stowed and piled up, same would not require any more than one-third of space it occupied.

The steamer *Orizaba* was lying at the wharf in Colon, and I went on board and interviewed the captain. We talked over affairs on the Isthmus, and he told me he had arrived at Colon on the morning of April 19, and it was then Sunday, April 23, 3.30 p. m., and his hatches had not yet been taken off.

He had 2,300 tons of cargo on board, and the steamship *Seguranca* was due the next day with 2,500 tons of cargo.

In conclusion, I would state that the necessities of the Canal Zone in the matters of freight and the transportation of materials have practically resulted in withdrawing about one-half of the rolling stock, formerly available for handling cargo across the Isthmus, with the result that the Panama Railroad Company are utterly unable to furnish the service we require in order to dispatch one of our ships every week.

I further beg to state that I have never seen cargo mixed together as the way it was delivered to my ship this time.

Hoping that this explanation may be satisfactory to you.

Respectfully submitted,

(Signed) S. SANDBERG, Commander.

STEAMSHIP CITY OF PANAMA, April 29, 1905.

Capt. S. SANDBERG,
Commander Steamship City of Panama.

SIR: Attached is a scrap log of the work performed on this ship while at La Boca, starting from April 18, 1905, to April 29, 1905,

Respectfully,

(Signed) JAMES J. RUDDEN,
First Officer Steamship City of Panama.

P. S.—Rubber from the coast for voyage No. 54, down, turned out complete by Panama Railroad check. This was checked by purser, first officer, and third officer, also freight clerk.

Respectfully,

(Signed)

J. A. RUDDEN.

LOG OF STEAMSHIP CITY OF PANAMA.

April 18, 1905:

Steamship *City of Panama* was alongside of La Boca pier at 1.30 p. m. April 18, 1905.

2.30 p. m.—Started to work two gangs clearing up deck cargo.

4.30 p. m.—Men knocked off and were taken to steamship *City of Para*. No more work this day.

April 19, 1905:

9 a. m.—Crew started aft to take out coffee.

11 a. m.—Knocked off work on dock.

12.30 p. m.—Discharged 60 boxes spuds for Pacific Steam Navigation Company into company's launch No. 5.

1 p. m.—Started crew on coffee again and finished at 6 p. m.

No shore gangs this day.

April 20, 1905:

6 a. m.—Started with crew aft to discharge cargo and continued rest of day.

No shore gangs this day.

April 21, 1905:

No work on cargo, being Good Friday. Crew ready to work, but no deck men.

April 22, 1905:

6 a. m.—Started two gangs aft of the crew, one on lumber, one on cargo.

6 a. m.—Shore gang forward.

10 a. m.—Put South Pacific cargo out with crew with launch No. 5.

6 p. m.—Shore gang knocked off, no men on pier (no cars).

7 p. m.—Crew started on lumber, "Panama local."

12 midnight.—Crew stopped work for the night.

April 23, 1905:

6 a. m.—Started three gangs for shore, one lumber, two merchandise. Crew assisted.

6 p. m.—Finished for the night. This day took in 25 tons of La Union cargo.

April 24, 1905:

6 a. m.—Started three shore gangs on cargo.

8.30 a. m.—Crane No. 10 at forward hatch broke down; shifted gang to forward port, taking out cargo.

9.30 a. m.—Cargo all out aft and started to take in cargo with two gangs, La Union cargo.

1 p. m.—Crane again in order, and started two gangs taking out cargo forward; one gang taking in San Francisco merchandise, crew mixed with gangs. Iron ready, but no men could be secured.

2.30 to 3.15 p. m.—Heavy rain; had to stop work till shower passed.

6 p. m.—Knocked off for supper.

7 p. m.—Resumed work with four gangs, one of which was on iron.

11 p. m.—Finished for the night.

April 25, 1905:

6 a. m.—Started four gangs on cargo; crew mixed with gangs.

10 a. m.—Iron from launch all in.

5.30 p. m.—Cargo all out.

5.40 p. m.—Started Corinto cargo forward. Hold inspected by captain.

6 p. m.—Knocked off for supper.

7 p. m.—Started work again, two gangs on cargo, one gang on coal.

11 p. m.—Knocked off for the night.

April 26, 1905:

6 a. m.—Started work on cargo, three gangs, and one gang on coal.

6 p. m.—Knocked off for supper.

7 p. m.—Resumed work, four gangs on cargo and one gang on coal.

11 p. m.—Knocked off for the night.

April 27, 1905:

6 a. m.—Started three gangs on cargo and one gang on coal.

5.50 p. m.—Coal all in.

6 p. m.—Knocked off for supper.

7 p. m.—Started four gangs on cargo.

9 p. m.—Knocked off one gang, railroad could not give any more cargo.

11 p. m.—Finished for the night.

April 28, 1905:

6 a. m.—Started four gangs on cargo.

11 a. m.—Cargo all in aft.

11 a. m.—Deck cargo all in.

1 p. m.—Only one gang on cargo.

6 p. m.—Knocked off for supper.

7 p. m.—Resumed work, one gang.

9 p. m.—Cargo all in ship and knocked off work.

April 29, 1905:

5.15 a. m.—Let go from La Boca pier and headed for sea.

Respectfully,

(Signed) JAS. RUDDEN.

STEAMSHIP "CITY OF PARA," VOY. 41, AT
San Francisco, Cal., May 24, 1905.

Subject: Freight remaining on Isthmus.

R. P. SCHWERIN, Esq.,

Vice-President and General Manager Pacific Mail Steamship Company.

DEAR SIR: In reply to your PM-77 re above-named subject, I will state Captain Sandberg and myself went to Colon, Sunday, April 23. We found the freight on the railroad pier piled from 4 to 8 feet high the entire length of the pier, between the north and south car tracks. On the north side of the pier there was very little freight. The freight was not piled in good order, but most of it thrown down on floor and up on top of the pile. All freight was piled in one pile, regardless of either marks or destinations. In other words, we saw freight in the pile for every port on the coast between Panama and San Francisco, including through freight. I made the statement to Mr. Pearne, I could take a gang of men, pile that freight, each destination separate, and guarantee not to take up not over one-half the space in which it was piled.

Considerable freight was sent to La Boca pier for the ship without either papers or check books. This was caused by the delay in not sending the manifests from Colon, so the respective companies' clerks could make out the check books to check each cargo by. Cargo was sent to La Boca pier which had been ordered forward by Mr. Pearne for the *Barracouta* and should have gone to the old American pier at Panama, where the outward was being loaded into lighters for the *Barracouta*, which was being loaded down the bay. Cargo was also sent to the American pier which should have been sent to La Boca for this ship. The day I was at Colon, the *Orizaba* had been in port four days and not one package of freight discharged. Yet the railroad officials wanted her freight to come forward in this ship.

In conclusion, I will state never before since I have been in the employ of the Pacific Mail Company have I ever seen or heard of such a terrible mixed-up mess in freight on the Isthmus as I saw last April, during the two weeks' stay at La Boca pier.

Respectfully,

(Signed) GEO. W. BROWN, Commander.

EXHIBIT M.

EXHIBIT M 1.

Copy of convention between the United States and the Republic of Panama for the construction of a ship canal to connect the waters of the Atlantic and Pacific Oceans.

PANAMA—SHIP CANAL.

CONVENTION BETWEEN THE UNITED STATES AND THE REPUBLIC OF PANAMA FOR THE CONSTRUCTION OF A SHIP CANAL TO CONNECT THE WATERS OF THE ATLANTIC AND PACIFIC OCEANS.

Signed at Washington, November 18, 1903.

Ratification advised by the Senate, February 23, 1904.

Ratified by the President, February 25, 1904.

Ratified by Panama, December 2, 1903.

Ratifications exchanged at Washington, February 26, 1904.

Proclaimed, February 26, 1904.

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA.

A PROCLAMATION.

Whereas, a Convention between the United States of America and the Republic of Panama to insure the construction of a ship canal across the Isthmus of Panama to connect the Atlantic and Pacific Oceans, was concluded and signed by their respective Plenipotentiaries at Washington, on the eighteenth day of November, one thousand nine hundred and three, the original of which Convention, being in the English language, is word for word as follows:

ISTHMIAN CANAL CONVENTION.

The United States of America and the Republic of Panama being desirous to insure the construction of a ship canal across the Isthmus of Panama to connect the Atlantic and Pacific Oceans, and the Congress of the United States of America having passed an act approved June 28, 1902, in furtherance of that object, by which the President of the United States is authorized to acquire within a reasonable time the control of the necessary territory of the Republic of Colombia, and the sovereignty of such territory being actually vested in the Republic of Panama, the high contracting parties have resolved for that purpose to conclude a convention and have accordingly appointed as their plenipotentiaries.

The President of the United States of America, John Hay, Secretary of State, and

The Government of the Republic of Panama, Philippe Bunau-Varilla, Envoy Extraordinary and Minister Plenipotentiary of the Republic of Panama, thereunto specially empowered by said government, who after communicating with each other their respective full powers, found to be in good and due form, have agreed upon and concluded the following articles:

ARTICLE I.

The United States guarantees and will maintain the independence of the Republic of Panama.

ARTICLE II.

The Republic of Panama grants to the United States in perpetuity the use, occupation and control of a zone of land and land under water for the construction, maintenance, operation, sanitation and protection of said Canal of the width of ten miles extending to the distance of five miles on each side of the center line of the route of the Canal to be constructed: the said zone beginning in the Caribbean Sea three marine miles from mean low water mark and extending to and across the Isthmus of Panama into the Pacific Ocean to a

distance of three marine miles from mean low water mark with the proviso that the cities of Panama and Colon and the harbors adjacent to said cities, which are included within the boundaries of the zone above described, shall not be included within this grant. The Republic of Panama further grants to the United States in perpetuity the use, occupation and control of any other lands and waters outside of the zone above described which may be necessary and convenient for the construction, maintenance, operation, sanitation and protection of the said Canal or of any auxiliary canals or other works necessary and convenient for the construction, maintenance, operation, sanitation and protection of the said enterprise.

The Republic of Panama further grants in like manner to the United States in perpetuity all islands within the limits of the zone above described and in addition thereto the group of small islands in the Bay of Panama, named Perico, Naos, Culebra and Flamenco.

ARTICLE III.

The Republic of Panama grants to the United States all the rights, power and authority within the zone mentioned and described in Article II of this agreement and within the limits of all auxiliary lands and waters mentioned and described in said Article II which the United States would possess and exercise if it were the sovereign of the territory within which said lands and waters are located to the entire exclusion of the exercise by the Republic of Panama of any such sovereign rights, power or authority.

ARTICLE IV.

As rights subsidiary to the above grants the Republic of Panama grants in perpetuity to the United States the right to use the rivers, streams, lakes and other bodies of water within its limits for navigation, the supply of water or water-power or other purposes, so far as the use of said rivers, streams, lakes and bodies of water and the waters thereof may be necessary and convenient for the construction, maintenance, operation, sanitation and protection of the said Canal.

ARTICLE V.

The Republic of Panama grants to the United States in perpetuity a monopoly for the construction, maintenance and operation of any system of communication by means of canal or railroad across its territory between the Caribbean Sea and the Pacific Ocean.

ARTICLE VI.

The grants herein contained shall in no manner invalidate the titles or rights of private land holders or owners of private property in the said zone or in or to any of the lands or waters granted to the United States by the provisions of any Article of this treaty, nor shall they interfere with the rights of way over the public roads passing through the said zone or over any of the said lands or waters unless said rights of way or private rights shall conflict with rights herein granted to the United States in which case the rights of the United States shall be superior. All damages caused to the owners of private lands or private property of any kind by reason of the grants contained in this treaty or by reason of the operations of the United States, its agents or employees, or by reason of the construction, maintenance, operation, sanitation and protection of the said Canal or of the works of sanitation and protection herein provided for, shall be appraised and settled by a joint Commission appointed by the Governments of the United States and the Republic of Panama, whose decisions as to such damages shall be final and whose awards as to such damages shall be paid solely by the United States. No part of the work on said Canal or the Panama Railroad or on any auxiliary works relating thereto and authorized by the terms of this treaty shall be prevented, delayed or impeded by or pending such proceedings to ascertain such damages. The appraisal of said private lands and private property and the assessment of damages to them shall be based upon their value before the date of this convention.

ARTICLE VII.

The Republic of Panama grants to the United States within the limits of the cities of Panama and Colon and their adjacent harbors and within the territory adjacent thereto the right to acquire by purchase or by the exercise of the right of eminent domain, any lands, buildings, water rights or other properties necessary and convenient for the construction, maintenance, operation and protection of the Canal and of any works of sanitation, such as the collection and disposition of sewage and the distribution of water in the said cities of Panama and Colon, which, in the discretion of the United States may be necessary and convenient for the construction, maintenance, operation, sanitation and protection of the said Canal and railroad. All such works of sanitation, collection and disposition of sewage and distribution of water in the cities of Panama and Colon shall be made at the expense of the United States, and the Government of the United States, its agents or nominees shall be authorized to impose and collect water rates and sewerage rates which shall be sufficient to provide for the payment of interest and the amortization of the principal of the cost of said works within a period of fifty years and upon the expiration of said term of fifty years the system of sewers and water works shall revert to and become the properties of the cities of Panama and Colon respectively, and the use of the water shall be free to the inhabitants of Panama and Colon, except to the extent that water rates may be necessary for the operation and maintenance of said system of sewers and water.

The Republic of Panama agrees that the cities of Panama and Colon shall comply in perpetuity with the sanitary ordinances whether of a preventive or curative character prescribed by the United States and in case the Government of Panama is unable or fails in its duty to enforce this compliance by the cities of Panama and Colon with the sanitary ordinances of the United States the Republic of Panama grants to the United States the right and authority to enforce the same.

The same right and authority are granted to the United States for the maintenance of public order in the cities of Panama and Colon and the territories and harbors adjacent thereto in case the Republic of Panama should not be, in the judgment of the United States, able to maintain such order.

ARTICLE VIII.

The Republic of Panama grants to the United States all rights which it now has or hereafter may acquire to the property of the New Panama Canal Company and the Panama Railroad Company as a result of the transfer of sovereignty from the Republic of Colombia to the Republic of Panama over the Isthmus of Panama and authorizes the New Panama Canal Company to sell and transfer to the United States its rights, privileges, properties and concessions as well as the Panama Railroad and all the shares or part of the shares of that company; but the public lands situated outside of the zone described in Article II of this treaty now included in the concessions to both said enterprises and not required in the construction or operation of the Canal shall revert to the Republic of Panama except any property now owned by or in the possession of said companies within Panama or Colon or the ports or terminals thereof.

ARTICLE IX.

The United States agrees that the ports at either entrance of the Canal and the waters thereof, and the Republic of Panama agrees that the towns of Panama and Colon shall be free for all time so that there shall not be imposed or collected custom house tolls, tonnage, anchorage, lighthouse, wharf, pilot, or quarantine dues or any other charges or taxes of any kind upon any vessel using or passing through the Canal or belonging to or employed by the United States, directly or indirectly, in connection with the construction, maintenance, operation, sanitation and protection of the main Canal, or auxiliary works, or upon the cargo, officers, crew, or passengers of any such vessels, except such tolls and charges as may be imposed by the United States for the use of the Canal and other works, and except tolls and charges imposed by the Republic of Panama upon merchandise destined to be introduced for the consumption of the rest of the Republic of Panama, and upon vessels touching at the ports of Colon and Panama and which do not cross the Canal.

The Government of the Republic of Panama shall have the right to establish in such ports and in the towns of Panama and Colon such houses and guards as it may deem necessary to collect duties on importations destined to other portions of Panama and to prevent contraband trade. The United States shall have the right to make use of the towns and harbors of Panama and Colon as places of anchorage, and for making repairs, for loading, unloading, depositing, or transshipping cargoes either in transit or destined for the service of the Canal and for other works pertaining to the Canal.

ARTICLE X.

The Republic of Panama agrees that there shall not be imposed any taxes, national, municipal, departmental, or of any other class, upon the Canal, the railways and auxiliary works, tugs and other vessels employed in the service of the Canal, store houses, work shops, offices, quarters for laborers, factories of all kinds, warehouses, wharves, machinery, and other works, property, and effects appertaining to the Canal or railroad and auxiliary works, or their officers or employees, situated within the cities of Panama and Colon, and that there shall not be imposed contributions or charges of a personal character of any kind upon officers, employees, laborers, and other individuals in the service of the Canal and railroad and auxiliary works.

ARTICLE XI.

The United States agrees that the official dispatches of the Government of the Republic of Panama shall be transmitted over any telegraph and telephone lines established for Canal purposes and used for public and private business at rates not higher than those required from officials in the service of the United States.

ARTICLE XII.

The Government of the Republic of Panama shall permit the immigration and free access to the lands and workshops of the Canal and its auxiliary works of all employees and workmen of whatever nationality under contract to work upon or seeking employment upon or in any wise connected with the said Canal and its auxiliary works, with their respective families, and all such persons shall be free and exempt from the military service of the Republic of Panama.

ARTICLE XIII.

The United States may import at any time into the said zone and auxiliary lands, free of custom duties, imposts, taxes, or other charges, and without any restrictions, any and all vessels, dredges, engines, cars, machinery, tools, explosives, materials, supplies, and other articles necessary and convenient in the construction, maintenance, operation, sanitation and protection of the Canal and auxiliary works, and all provisions, medicines, clothing, supplies and other things necessary and convenient for the officers, employees, workmen and laborers in the service and employ of the United States and for their families. If any such articles are disposed of for use outside of the zone and auxiliary lands granted to the United States and within the territory of the Republic, they shall be subject to the same import or other duties as like articles imported under the laws of the Republic of Panama.

ARTICLE XIV.

As the price or compensation for the rights, powers and privileges granted in this convention by the Republic of Panama to the United States, the Government of the United States agrees to pay to the Republic of Panama the sum of ten million dollars (\$10,000,000) in gold coin of the United States on the exchange of the ratification of this convention and also an annual payment during the life of this convention of two hundred and fifty thousand dollars (\$250,000) in like gold coin, beginning nine years after the date aforesaid.

The provisions of this Article shall be in addition to all other benefits assured to the Republic of Panama under this convention.

But no delay or difference of opinion under this Article or any other provisions of this treaty shall affect or interrupt the full operation and effect of this convention in all other respects.

ARTICLE XV.

The joint commission referred to in Article VI shall be established as follows:

The President of the United States shall nominate two persons and the President of the Republic of Panama shall nominate two persons and they shall proceed to a decision; but in case of disagreement of the Commission (by reason of their being equally divided in conclusion) an umpire shall be appointed by the two Governments who shall render the decision. In the event of the death, absence, or incapacity of a Commissioner or Umpire, or of his omitting, declining or ceasing to act, his place shall be filled by the appointment of another person in the manner above indicated. All decisions by a majority of the Commission or by the umpire shall be final.

ARTICLE XVI.

The two Governments shall make adequate provision by future agreement for the pursuit, capture, imprisonment, detention and delivery within said zone and auxiliary lands to the authorities of the Republic of Panama of persons charged with the commitment of crimes, felonies or misdemeanors without said zone and for the pursuit, capture, imprisonment, detention and delivery without said zone to the authorities of the United States of persons charged with the commitment of crimes, felonies and misdemeanors within said zone and auxiliary lands.

ARTICLE XVII.

The Republic of Panama grants to the United States the use of all the ports of the Republic open to commerce as places of refuge for any vessels employed in the Canal enterprise, and for all vessels passing or bound to pass through the Canal which may be in distress and be driven to seek refuge in said ports. Such vessels shall be exempt from anchorage and tonnage dues on the part of the Republic of Panama.

ARTICLE XVIII.

The Canal, when constructed, and the entrances thereto shall be neutral in perpetuity, and shall be opened upon the terms provided for by Section I of Article three of, and in conformity with all the stipulations of, the treaty entered into by the Governments of the United States and Great Britain on November 18, 1901.

ARTICLE XIX.

The Government of the Republic of Panama shall have the right to transport over the Canal its vessels and its troops and munitions of war in such vessels at all times without paying charges of any kind. The exemption is to be extended to the auxiliary railway for the transportation of persons in the service of the Republic of Panama, or of the police force charged with the preservation of public order outside of said zone, as well as to their baggage, munitions of war and supplies.

ARTICLE XX.

If by virtue of any existing treaty in relation to the territory of the Isthmus of Panama, whereof the obligations shall descend or be assumed by the Republic of Panama, there may be any privilege or concession in favor of the Government or the citizens and subjects of a third power relative to an interoceanic means of communication which in any of its terms may be incompatible with the terms of the present convention, the Republic of Panama agrees to cancel or modify such treaty in due form, for which purpose it shall give to the said third power the requisite notification within the term of four months from the date of the present convention, and in case the existing treaty contains no clause permitting its modifications or annulment, the Republic of Panama agrees to procure its modification or annulment in such form that there shall not exist any conflict with the stipulations of the present convention.

ARTICLE XXI.

The rights and privileges granted by the Republic of Panama to the United States in the preceding Articles are understood to be free of all anterior debts,

liens, trusts, or liabilities, or concessions or privileges to other Governments, corporations, syndicates or individuals, and consequently, if there should arise any claims on account of the present concessions and privileges or otherwise, the claimants shall resort to the Government of the Republic of Panama and not to the United States for any indemnity or compromise which may be required.

ARTICLE XXII.

The Republic of Panama renounces and grants to the United States the participation to which it might be entitled in the future earnings of the Canal under Article XV of the concessionary contract with Lucien N. B. Wyse now owned by the New Panama Canal Company and any and all other rights or claims of a pecuniary nature arising under or relating to said concession, or arising under or relating to the concessions to the Panama Railroad Company or any extension or modification thereof; and it likewise renounces, confirms, and grants to the United States, now and hereafter, all the rights and property reserved in the said concessions which otherwise would belong to Panama at or before the expiration of the terms of ninety-nine years of the concessions granted to or held by the above mentioned party and companies, and all right, title and interest which it now has or may hereafter have, in and to the lands, canal, works, property and rights held by the said companies under said concessions or otherwise, and acquired or to be acquired by the United States from or through the New Panama Canal Company, including any property and rights which might or may in the future either by lapse of time, forfeiture or otherwise, revert to the Republic of Panama under any contracts or concessions, with said Wyse, the Universal Panama Canal Company, the Panama Railroad Company and the New Panama Canal Company.

The aforesaid rights and property shall be and are free and released from any present or reversionary interest in or claims of Panama and the title of the United States thereto upon consummation of the contemplated purchase by the United States from the New Panama Canal Company, shall be absolute, so far as concerns the Republic of Panama, excepting always the rights of the Republic specifically secured under this treaty.

ARTICLE XXIII.

If it should become necessary at any time to employ armed forces for the safety or protection of the Canal, or of the ships that make use of the same, or the railways and auxiliary works, the United States shall have the right, at all times and in its discretion, to use its police and its land and naval forces or to establish fortifications for these purposes.

ARTICLE XXIV.

No change either in the Government or in the laws and treaties of the Republic of Panama shall, without the consent of the United States, affect any right of the United States under the present convention, or under any treaty stipulation between the two countries that now exist or may hereafter exist touching the subject matter of this convention.

If the Republic of Panama shall hereafter enter as a constituent into any other Government or into any union or confederation of states, so as to merge her sovereignty or independence in such Government, union or confederation, the rights of the United States under this convention shall not be in any respect lessened or impaired.

ARTICLE XXV.

For the better performance of the engagements of this convention and to the end of the efficient protection of the Canal and the preservation of its neutrality, the Government of the Republic of Panama will sell or lease to the United States lands adequate and necessary for naval or coaling stations on the Pacific Coast and on the Western Caribbean Coast of the Republic at certain points to be agreed upon with the President of the United States.

ARTICLE XXVI.

This convention when signed by the Plenipotentiaries of the Contracting Parties shall be ratified by the respective Governments and the ratifications shall be exchanged at Washington at the earliest date possible.

In faith whereof the respective Plenipotentiaries have signed the present convention in duplicate and have hereunto affixed their respective seals.

Done at the City of Washington the 18th day of November in the year of our Lord nineteen hundred and three.

JOHN HAY [SEAL]

P. BUNAU VARILLA [SEAL]

And whereas the said Convention has been duly ratified on both parts, and the ratifications of the two governments were exchanged in the City of Washington, on the twenty-sixth day of February, one thousand nine hundred and four;

Now, therefore, be it known that I, Theodore Roosevelt, President of the United States of America, have caused the said Convention to be made public, to the end that the same and every article and clause thereof, may be observed and fulfilled with good faith by the United States and the citizens thereof.

In testimony whereof, I have hereunto set my hand and caused the seal of the United States of America to be affixed.

Done at the City of Washington, this twenty-sixth day of February, in the year of our Lord one thousand nine hundred and four, and of the Independence of the United States the one hundred and twenty-eighth.

[SEAL]

THEODORE ROOSEVELT.

By the President:

JOHN HAY.

Secretary of State.

EXHIBIT M 2.

Copy of treaty between the United States and Great Britain to facilitate the construction of a ship canal.

GREAT BRITAIN—INTEROCEANIC CANAL.

TREATY BETWEEN THE UNITED STATES AND GREAT BRITAIN TO FACILITATE THE CONSTRUCTION OF A SHIP CANAL.

Signed at Washington, November 18, 1901.

Ratification advised by the Senate, December 16, 1901.

Ratified by the President, December 26, 1901.

Ratified by Great Britain, January 20, 1902.

Ratifications exchanged at Washington, February 21, 1902.

Proclaimed, February 22, 1902.

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA.

A PROCLAMATION.

Whereas, a Convention between the United States of America and the United Kingdom of Great Britain and Ireland, to facilitate the construction of a ship canal to connect the Atlantic and Pacific Oceans, by whatever route may be considered expedient, and to that end to remove any objection which may arise out of the Convention of the 19th April, 1850, commonly called the Clayton-Bulwer treaty, to the construction of such canal under the auspices of the Government of the United States, without impairing the "general principle" of neutralization established in Article VIII of that Convention, was concluded and signed by their respective plenipotentiaries at the city of Washington on the 18th day of November, 1901, the original of which Convention is word for word as follows:

The United States of America and His Majesty Edward the Seventh, of the United Kingdom of Great Britain and Ireland, and of the British Dominions beyond the Seas, King, and Emperor of India, being desirous to facilitate the construction of a ship canal to connect the Atlantic and Pacific Oceans, by whatever route may be considered expedient, and to that end to remove any objection which may arise out of the Convention of the 19th April, 1850, commonly called the Clayton-Bulwer Treaty, to the construction of such canal under the

auspices of the Government of the United States, without impairing the "general principle" of neutralization established in Article VIII of that Convention, have for that purpose appointed as their Plenipotentiaries:

The President of the United States, John Hay, Secretary of State of the United States of America;

And His Majesty Edward the Seventh, of the United Kingdom of Great Britain and Ireland, and of the British Dominions beyond the Seas, King, and Emperor of India, the Right Honourable Lord Pauncefoot, G. C. B., G. C. M. G., His Majesty's Ambassador Extraordinary and Plenipotentiary to the United States;

Who, having communicated to each other their full powers which were found to be in due and proper form, have agreed upon the following Articles:

ARTICLE I.

The High Contracting Parties agree that the present Treaty shall supersede the afore-mentioned Convention of the 19th April, 1850.

ARTICLE II.

It is agreed that the canal may be constructed under the auspices of the Government of the United States, either directly at its own cost, or by gift or loan of money to individuals or Corporations, or through subscription to or purchase of stock or shares, and that, subject to the provisions of the present Treaty, the said Government shall have and enjoy all the rights incident to such construction as well as the exclusive right of providing for the regulation and management of the canal.

ARTICLE III.

The United States adopts, as the basis of the neutralization of such ship canal, the following Rules, substantially as embodied in the Convention of Constantinople, signed the 28th October, 1888, for the free navigation of the Suez Canal, that is to say:

1. The canal shall be free and open to the vessels of commerce and of war of all nations observing these Rules, on terms of entire equality, so that there shall be no discrimination against any such nation, or its citizens or subjects, in respect of the conditions or charges of traffic, or otherwise. Such conditions and charges of traffic shall be just and equitable.

2. The canal shall never be blockaded, nor shall any right of war be exercised nor any act of hostility be committed within it. The United States, however, shall be at liberty to maintain such military police along the canal as may be necessary to protect it against lawlessness and disorder.

3. Vessels of war of a belligerent shall not revictual nor take any stores in the canal except so far as may be strictly necessary; and the transit of such vessels through the canal shall be effected with the least possible delay in accordance with the Regulations in force, and with only such intermission as may result from the necessities of the service.

Prizes shall be in all respects subject to the same Rules as vessels of war of the belligerents.

4. No belligerent shall embark or disembark troops, munitions of war, or warlike materials in the canal, except in case of accidental hindrance of the transit, and in such case the transit shall be resumed with all possible dispatch.

5. The provisions of this Article shall apply to waters adjacent to the canal, within 3 marine miles of either end. Vessels of war of a belligerent shall not remain in such waters longer than twenty-four hours at any one time, except in case of distress, and in such case, shall depart as soon as possible; but a vessel of war of one belligerent shall not depart within twenty-four hours from the departure of a vessel of war of the other belligerent.

6. The plant, establishments, buildings, and all works necessary to the construction, maintenance, and operation of the canal shall be deemed to be part thereof, for the purposes of this Treaty, and in time of war, as in time of peace, shall enjoy complete immunity from attack or injury by belligerents, and from acts calculated to impair their usefulness as part of the canal.

ARTICLE IV.

It is agreed that no change of territorial sovereignty or of the international relations of the country or countries traversed by the before-mentioned canal shall affect the general principle of neutralization or the obligation of the High Contracting Parties under the present Treaty.

ARTICLE V.

The present Treaty shall be ratified by the President of the United States, by and with the advice and consent of the Senate thereof, and by His Britannic Majesty; and the ratifications shall be exchanged at Washington or at London at the earliest possible time within six months from the date hereof.

In faith whereof the respective Plenipotentiaries have signed this Treaty and thereunto affixed their seals.

Done in duplicate at Washington, the 18th day of November, in the year of Our Lord one thousand nine hundred and one.

JOHN HAY [SEAL]
PAUNCEFOTE [SEAL]

And Whereas the said Convention has been duly ratified on both parts, and the ratification of the two Governments were exchanged in the city of Washington on the twenty-first day of February, one thousand nine hundred and two;

Now, therefore, be it known that I, Theodore Roosevelt, President of the United States of America, have caused the said Convention to be made public, to the end that the same and every article and clause thereof may be observed and fulfilled with good faith by the United States and the citizens thereof.

In witness whereof I have hereunto set my hand and caused the seal of the United States to be affixed.

Done at the City of Washington, this twenty-second day of February, in the year of Our Lord one thousand nine hundred and two, and of the Independence of the United States the one hundred and twenty-sixth.

THEODORE ROOSEVELT.

By the President:

JOHN HAY
Secretary of State.

EXHIBIT N.

MISCELLANEOUS EXHIBITS.

EXHIBIT N 1.

DEPARTMENT OF COMMERCE AND LABOR.

OFFICE OF THE SECRETARY.

Washington March 19, 1904.

Sir: Referring to the convention recently concluded between this country and the Republic of Panama, I beg to invite your attention to the following statements, with a view to their investigation and the correction of any abuses which may be found to exist.

It is said that the Panama Railroad Company has made periodical arrangements with certain steamship companies on both sides of the Isthmus, and by its refusal to facilitate traffic in the freight brought by rival lines has practically created monopolies for the favored lines; that so many have been the obstacles presented to commercial traffic across the Isthmus that, in spite of the comparatively short distance separating New York from Callao (3,218 miles), the bulk of commerce has been carried on via the Straits of Magellan (8,385 miles), and that the main obstacles have been high rates on the isthmian railroad and the monopolies that the company owning the road has established or encouraged.

It is further alleged that the freight rate on commodities passing across the Isthmus is divided into three equal parts, one-third going to the two combined Pacific steamship companies, one-third to the Panama Railroad Steamship Company, and the remainder to the Panama Railroad Company, so that the railroad

transportation rate for a service of about 40 miles equals the rate paid to the Pacific steamship companies for a service of 1,337 miles.

As another illustration of the evils complained of, the statement is made that, while the distances are very nearly the same, a trip from New York to Europe for a first-class passenger costs an average of \$60 and consumes seven days, whereas a trip from New York to Callao costs about \$200 and requires, when good connections are made at the Isthmus, about sixteen days. Attention has also been drawn to the alleged excessive charges made by the Panama Railroad Company for the transportation of luggage in excess of the limit of 150 pounds allowed each passenger.

If the above-mentioned allegations are found to be in accordance with the facts, and if, when this Government comes into possession of the railroad line in question, these obstacles to commerce may be removed and uniform and reasonable rates established, some of the benefits to be derived from the treaty will be secured even before the completion of the canal.

Very respectfully, yours,

(Signed) GEO. B. CORTELYOU, *Secretary.*

To the PRESIDENT.

EXHIBIT N 2.

PANAMA RAILROAD COMPANY.
PANAMA RAILROAD,
PANAMA RAILROAD STEAMSHIP LINE.
New York, August 5, 1904.

Mr. D. I. MURPHY,
*Secretary Isthmian Canal Commission,
Evening Star Building, Washington, D. C.*

DEAR SIR: I acknowledge receipt of your telegram of this date, thus:

"Please wire immediately date of expiration contract between Panama Railroad Company and Pacific Mail Steamship Company."

and confirm my reply of the same date, thus:

"The contract continues until June 11, 1907, but contains a provision in supplemental agreement of same date that it may be terminated upon six months' notice, in writing, by either party in the event that the United States Government becomes the owner of a majority of the shares of the railroad. Copy of contract follows by mail."

I inclose herewith copies of the contracts referred to.

Yours, truly,

(Signed) E. A. DRAKE,
Second Vice-President.

EXHIBIT N 3.

[Telegram.]

PORTLAND, OREG., August 9, 1904.

To Chairman Panama Canal Commission, Washington, D. C.:

Chamber of commerce is against renewal of contract Panama Company and Pacific Mail Steamship Company as being detrimental to interests of people west of Rockies. Resolutions follow.

W. J. BURNS,
President Chamber of Commerce.

EXHIBIT N 4.

[Telegram.]

ISTHMIAN CANAL COMMISSION, August 10, 1904.

To W. J. BURNS,

President Chamber of Commerce, Portland, Oreg.:

As Panama Railroad is not yet under governmental control, contract in question can not now be terminated. Isthmian Canal Commission will regulate

policy of railroad when they are constituted majority of board of directors by election first Monday in April next, after which due notice will be given all parties in interest with view of termination.

_____, Secretary.

EXHIBIT N 5.

UNITED STATES SENATE,
COMMITTEE ON CANADIAN RELATIONS.
Astoria, Oreg., August 3, 1904.

The PRESIDENT,

The White House, Washington, D. C.

MY DEAR MR. PRESIDENT: Pardon me for intruding on your time when you should be permitted to enjoy a vacation. There is a matter in which all of the people on the Pacific coast are deeply interested, and about which many of them are very much concerned; that is, whether or not the contract which the Pacific Mail Steamship Company had with the Panama Railroad Company at the time the United States acquired control of said railroad company is to be renewed. It has doubtless been called to your attention that a contract existed between said steamship company and the railroad company at the time the General Government acquired the railroad, which practically gave to the Pacific Mail Steamship Company the exclusive handling of all freight and traffic that crossed the Isthmus. It is rumored that the Panama Canal Commission contemplates entering into a similar contract with the Pacific Mail Steamship Company. Of course, the shippers, and indeed the consumers, so far as I understand the matter, are opposed to any preference whatever being given to any line or company, for should the contract not be renewed, a fleet of independent vessels would unquestionably appear between New York and Colon and between Panama and ports on the Pacific. It is very important that such conditions should be brought about, for when there was competition via the Isthmus freights which are now \$1 per hundredweight were then 35 cents per hundredweight, and there is no reason why, if we shall secure competition again, freights will not be correspondingly reduced. We on the Pacific coast are therefore very deeply interested in preventing any preference whatever being given to any steamship line on either side of the Isthmus. I do not know, of course, and do not pretend to say that the Commission contemplates entering into any such contract, but assume that nothing of the kind will be done without consulting you, and therefore have presumed to address you on the subject.

Very respectfully,

(Signed) C. W. FULTON.

EXHIBIT N 6.

WHITE HOUSE, Washington, August 8, 1904.

GENTLEMEN: The President directs me to ask you to be good enough to send him a report on the matter referred to in the inclosed letter from Senator Fulton, dated the 3d instant.

Very truly, yours,

(Signed) WM. LOEB, Jr.,
Secretary to the President.

ISTHMIAN CANAL COMMISSION,
Washington, D. C.

EXHIBIT N 7.

AUGUST 10, 1904.

MR. PRESIDENT: I have the honor to acknowledge the receipt of your note of the 8th instant, addressed to the chairman of the Commission, asking for a report in the matter of contracts between the Panama Railroad Company and the Pacific Mail Steamship Company, and inclosing a letter from Senator Fulton, of Oregon, of date of August 3, 1904.

In the absence of the chairman, I beg to state that on the 11th day of June, 1902, a contract was entered into between the two corporations mentioned, the

intent and purpose being, as set forth in Article III of that instrument, to obtain for the "Panama route all of the freight business possible that can be secured at reasonable and remunerative rates." I beg to transmit herewith copy of that contract and also copy of supplemental agreement of the same date.

Article XXI of the contract provides that:

"Subject to the provisions of a contemporaneous agreement between the parties hereto of even date herewith, this contract * * * shall remain in force for three years from the eleventh day of June, 1902, and for the further period of two years, if either party shall so elect, and if such party shall have given notice of such election to the other party at least ninety (90) days before the expiration of the first term of three years."

To be able to answer intelligently the many inquiries from the Pacific coast in regard to this matter, I telegraphed Mr. E. A. Drake, vice-president Panama Railroad Company, for information, and under date of the 5th instant he wired the following:

"The contract continues until June 11, 1907, but contains a provision in supplemental agreement of same date that it may be terminated upon six months' notice in writing by either party in the event that the United States Government becomes the owner of the majority of the shares of the railroad."

Under date of the 8th Mr. Drake advised me by letter "of an understanding had with Admiral Walker, prior to his departure, at the last meeting of our board of directors to which he had just been elected, that no steps should be taken to in any way impair the value to this company of its contract with the Pacific Mail Steamship Company, until a thorough examination had been made into the motives for its conclusion."

In the same letter Mr. Drake advised me that "the coastwise business, carried on under that contract, constitutes approximately 48½ per cent of the total business of the company, covering earnings which determine whether any year's business is profitable or not."

Mr. Drake's letter concludes as follows:

"Without advice as to the motive of your inquiry, I volunteer this information to, if possible, prevent any hurried action in the direction of complying with requests of parties not interested in the 'Isthmus route' that our contract with the Pacific Mail Steamship Company be abrogated forthwith."

Referring to the supplemental agreement, I respectfully invite your notice to the fourth article, wherein it is provided that—

"If at any time during the continuance of said traffic agreement, a majority of the shares of the railroad company or its railroad property shall be purchased or acquired by the United States of America, or by any person or persons representing it, or acting in its behalf, then either party hereto may give notice in writing to the other of its intention to terminate said traffic agreement, and at the expiration of six months from the giving of such notice the said traffic agreement and the previous articles of this agreement shall terminate, come to an end, and be utterly null and void thenceforth, anything in said traffic agreement or herein contained to the contrary notwithstanding."

I note Senator Fulton's remarks regarding the increase in freight charges, presumably because of the contract between the two corporations mentioned, and I believe I am not misstating the ideas of the chairman and the members of the Commission (all of whom, with one exception, are now on the Isthmus) in saying that when they constitute a majority of the board of directors of the Panama Railroad Company a monopoly of freight carrying will not be tolerated.

It is proper to state that there are now but three members of this Commission in the directorate of the Panama Railroad Company, viz, Admiral Walker, Mr. Burr, and Mr. Grunsky, and they were elected only recently to fill existing vacancies. There are thirteen directors of the corporation, and I find that the next meeting to elect directors will not be held until the first Monday in April, 1905.

I have the honor to state in conclusion that I will transmit, by the next mail to the Isthmus, to the chairman of the Commission copy of your note and copy of Senator Fulton's letter.

I am, Mr. President, with great respect,

The PRESIDENT, White House.

_____, Secretary.

EXHIBIT N 8.

[Exhibits referred to in this letter are not published, as it is not practicable, many of them being superseded by other exhibits in this report.]

Prof. WILLIAM H. BURR, *New York.*

SEPTEMBER 24, 1904.

DEAR SIR: Complying with your request for a synopsis of the revenue from the traffic of the Panama Railroad Company, I invite your attention to the following figures for the year 1903:

Freight, Colon to Panama.

FROM EUROPE.

	Tons.	Revenue.	Average rate per ton.	Percent- age of through rate.
For—				
Panama	5,827	\$58,884.48	\$10.10	
Central America	19,065	67,665.28	3.54	24
Mexico	1,311	4,817.15	3.67	25
San Francisco	1,023	5,320.02	5.20	24
Tumaco, Buenaventura, Esmeraldas, Bahia, and Manta	5,291	19,915.72	3.76	25
Guayaquil	14,039	44,735.21	3.19	25
Other Southern Pacific ports	14,034	47,080.97	3.35	25
Total	61,881	248,977.83	4.02	

FROM NEW YORK.

	Tons.	Revenue.	Average rate per ton.	Percent- age of through rate.
For—				
Panama	7,985	\$44,600.54	\$5.59	45
Central America	12,120	51,701.18	4.27	25
Mexico	1,287	5,910.37	4.60	25
San Francisco	35,823	94,084.50	2.63	22.5
Tumaco, Buenaventura, Esmeraldas, Bahia, and Manta	4,475	18,044.06	4.03	27.9
Guayaquil	7,385	22,966.56	3.11	27.9
Other southern Pacific ports	6,956	21,529.36	3.09	27.9
Total	76,030	258,871.17	3.40	

Freight, Panama to Colon.

FOR EUROPE.

	Tons.	Revenue.	Average rate per ton.	Percent- age of through rate.
From—				
Panama	1,048	\$6,875.50	\$6.56	
Central America	40,695	142,164.68	3.50	25
Mexico	1,704	6,090.68	3.57	25
San Francisco	2,176	7,984.20	3.67	24
Tumaco and Buenaventura	3,913	20,387.58	5.21	
Guayaquil	11,991	48,202.18	4.02	25
Other southern Pacific ports	10,138	32,461.26	3.20	25
Total	71,576	264,168.17	3.69	

FOR NEW YORK.

	Tons.	Revenue.	Average rate per ton.	Percent- age of through rate.
From—				
Panama	4,762	\$16,713.20	\$3.51	
Central America	5,116	24,861.42	4.86	27
Mexico	296	2,285.96	7.72	27
San Francisco	28,881	66,415.50	2.27	22.5
Tumaco and Buenaventura	3,107	15,068.13	5.14	
Guayaquil	4,894	20,513.58	4.19	27.9
Other southern Pacific ports	13,661	47,500.30	3.48	27.9
Total	60,707	193,330.18	3.18	
Bananas	11,230	16,690.80	1.49	20

Way freight (Panama Railroad and Canal freight excluded).

	Tons.	Revenue.	Average rate per ton
Toward			
Panama	22,177	\$ 1,318.51	\$3.76
Colon	16,139	22,754.78	2.24

MAILS

	Tons.	Revenue.
Toward		
Panama, pounds	389,977	\$50,296.41
Colon, pounds	85,902	5,178.90

TREASURE.

Toward		
Panama (value).	2,552,439	\$7,900.98
Colon (value).	5,274,821	15,137.63

BAGGAGE.

Toward		
Panama, pounds	363,409	\$8,495.64
Colon, pounds	267,500	7,514.43

PASSENGERS.

Toward		
Panama, persons	37,512	\$32,759.08
Colon, persons	40,359	32,662.56

STEAMSHIP LINE.

Freight, New York to Colon	82,327	\$674,440.02
Freight, Colon to New York	75,982	
Treasure		5,119.86
Mails		81,015.34
Extra baggage		1,905.90
Passengers		154,238.89

FIRST GROUP—FROM EUROPE.

This revenue was produced by rates of the several lines, practically the same as those shown in the inclosed tariffs of the Leyland Line dated November and December, 1902. (Exhibits A and B, the former for San Francisco.) The only material changes in these rates are an advance of 5 shillings per ton to Panama, made by the steamship lines in November, 1903 (Hamburg America Line tariff, March 15, 1904, Exhibit B No. 2), because of the various charges fixed upon the steamship lines by the Government of Colombia; and a reduction of the fourth-class rate, Liverpool to Mazatlan—now 25 shillings. All of the rates in the tariffs have been made to compete with the steamship lines from Europe via Magellan, sailing vessels via Cape Horn, and, in the case of San Francisco, the steamers transshipping at New Orleans.

Panama.—The through rates have been divided by a different percentage for each class, but we recently agreed with the steamship lines that we would accept 55 per cent of the through rates. The high average rate is manifestly due to the higher classes of cargo going from Europe, while Panama looks to New York for most staples, taking lower rates of freight.

GUAYMAS, ILL. AND THE PORTS OF PERU AND CHILE.

Competition via Magellan has been extremely active in recent years, and the various steamship lines working by both routes have found the traffic unremunerative; so that they recently agreed to a change in classification of goods and an advance in rates to the ports of Peru and Chile, the Magellan lines making it conditional upon our concurrence. This we gave in July, it being thought that the result would be an increased movement, via the Isthmus, of the higher classes of freight to the upper ports, where our time is quicker than that of the Magellan lines, while the Magellan lines would have equal advantages in time to Valparaiso, and could increase their low-grade traffic by lower rates than ours to the more northerly ports. It is expected that the new tariffs will go into effect 1st proximo.

SECOND GROUP—FROM NEW YORK.

Panama.—Tariff in effect December 18, 1900 (Exhibit C), governed by classification (Exhibit D) practically the same as that in use from Europe, as printed on back of Exhibit B. The class rates are also the same as from Europe, but the "exceptions" are made to meet differing conditions here, and to compete with goods shipped from San Francisco to Panama. The percentage 45 is a mere arbitrary division between our railroad and steamship accounts, but accounts for part of the difference between the average revenue of \$10.10 per ton on traffic from Europe and \$5.59 per ton on traffic from New York.

Central America.—Tariff in effect December 18, 1900, except flour, advanced March 31, 1903, to 50 cents per 100 pounds. (Exhibit E.) These rates are also practically the same as from Europe, the exceptions being products of this country, naturally moving from this market. The particularly low rate for refined petroleum was found necessary because when higher, enterprising shippers accumulated orders, chartered sailing vessels, saved loss of oil incidental to the number of transshipments by our route, and eked out a profitable voyage by adding some of the better paying freight, which in the absence of the special competition, is content to take our more expensive route. Here, as in the case of Panama, the percentage 27 is an arbitrary division between our railroad and our steamship accounts, the company having 60 per cent of the through rates and assigning 45 per cent of that to the railroad.

Mexico.—Tariff in effect April 16, 1901 (Exhibit F), same, with the exception of Mazatlan, as then in effect from Europe. In November, 1902, the lines from Europe reduced to same basis as to Central America. It has not been thought worth while to reduce from New York for the insignificant traffic which seeks the west coast, the interior of Mexico being supplied by the railroads from the Atlantic seaboard of Mexico or from this country. With regard to Mazatlan, when the railroads of the United States made their rates to Guaymas, on the Gulf of California, we made our rates to Mazatlan the same, to give Mazatlan equal opportunity as a point for distribution. The result has not met our expectations, for the Germans of Mazatlan continue their old practice of loading several sailing vessels each year in Hamburg at rates as low as 20 shillings per ton, and the vessels fill up by drawing some cargo from England and from here. The sailing vessels get homeward cargoes of ore and wood by loading at various ports about the Gulf of California and near by, where steamers can not or do not call. Here, again, the allotment of revenue to the railroad is an arbitrary division with our steamship company.

San Francisco.—Includes also traffic transhipped at that port for ports beyond, and is rated according to tariffs:

San Francisco Rate Circular, No. 7, (Exhibit G) Sup. No. 1 attached.

Tariff No. 6, N. P. C. (Exhibit H), Sup. No. 1 attached.

Tariff No. 2, C. T. (Exhibit I), Sup. No. 1 attached.

Tariff No. 4, S. C. (Exhibit J), Sup. No. 1 attached.

These tariffs, like the tariffs of the transcontinental railroads, are governed by the western classification (Exhibit K), except where the transcontinental lines make specific rates on commodities, as in their publication No. C-22 (Exhibit L), and, speaking generally, our rates are lower than these 30 per cent for shipments in less than carloads and 20 per cent for shipments in carloads, provided the rate from the interior to New York is not more than 20 cents per 100 pounds, and that the revenue, after providing for carriage beyond San Francisco, if so destined leaves at least 40 cents per 100 pounds New York to San Francisco. Special rates are made from time to time, as shown by tariff of special

rates to San Francisco No. 1, effective August, 1903 (Exhibit M), to meet steamer competition via New Orleans or via Magellan, and overcome the handicap of our route in the way of marine insurance (rates via New Orleans include insurance), less frequent sailings, and rehandling of cargo packed in a frail manner.

TUMACO, ETC., GUAYAQUIL AND OTHER PORTS SOUTH.

All ports south of Panama are rated as per tariff No. 1, in effect August 14, 1900 (Exhibit N), except for special rates made from time to time in competition with the steamers of the Grace Line or those of Beeche, Duval & Co., operating from here via the Straits of Magellan. We have undertaken to supersede this tariff with a new classification, and with rates to Peru and Chile to accord with those mentioned above as to go into effect from Europe, October 1 next, always reserving to ourselves the right to make special rates as may be necessary to compete with the lines out of New York.

THIRD GROUP—TO EUROPE.

Proportionate rates in use are those of tariff dated January 3, 1893. (Exhibit O.) Shipments are mostly produce of the Republic of Panama, on which we rebate 50 per cent under Article XX of our contract made with Colombia in 1867, as amended August 18, 1891.

The revenue shown above:

Panama, toward Europe	\$6,875.50
Buenaventura and Tumaco, toward Europe	29,387.58
Buenaventura and Tumaco, toward New York	15,968.13
Is gross	43,231.20
Colombian drawbacks paid in 1903	21,930.13

Central America and Mexico.—Now governed by tariff No. 32, dated December 15, 1903, as amended (Exhibit P). The same rates practically were in effect in 1903, except for coffee in the early months, when from 70 shillings and 95 shillings, with rebates for quantity, they dropped to 50 shillings and 75 shillings, under disastrous competition with the Kosmos steamers operating via Magellan. In July, 1903, the Kosmos steamers and the steamers operating on both sides of the Isthmus in conjunction with us, reached an agreement to maintain stability in the coffee rates, which continues through the coming season.

San Francisco.—Tariff No. 40, dated December 15, 1902, still in effect (Exhibit Q). This subdivision of our revenue includes such little freight as moves from San Francisco to the West Indies, now governed by tariff No. 70, July 15, 1904 (Exhibit R).

Tumaco and Buenaventura shipments, when of Colombian products, were, prior to November, 1903, subject to claims for rebate of 50 per cent of our proportion of the through rates. Most of the business moved under contracts made by the steamship lines, and we were paid the arbitraries penciled opposite rates in Exhibit S, of January 1, 1904. We are now in correspondence with the co-carriers, advocating that these ports be grouped with the minor ports of Ecuador, as they are for outward cargo, and that tariffs and divisions of rates shall accord.

Guayaquil shipments of cocoa prior to June, 1904, were also subject to contract rates, with rebates for quantity, but here again a ruinous competition has resulted in an agreement between the lines via Magellan and the lines via the Isthmus, whereby our rate is now 60 shillings per ton for any quantity.

Other south Pacific ports, as well as Ecuadorian and Colombian ports, are covered by the inclosed tariff, dated Valparaiso, March 1, 1904 (Exhibit T), but the agents on the west coast of South America have instructions from their chiefs to disregard these rates whenever it is necessary to do so in order to compete with vessels calling at their ports en route via Magellan. As a consequence the tariff is of but little moment.

FOURTH GROUP TO NEW YORK.

Panama.—Rates have been made from time to time to meet the necessities of the traffic. We have no published tariff. The rates at present in use are shown by Exhibit U. It is customary, when issuing through bills of lading for ship-

ments of Panama produce, to deduct the drawback (Article XX of contract with Colombia), so that the revenue shown on page 2 is net.

Central America and Mexico.—Tariff No. 23, in effect July 15, 1903, with supplements (Exhibit V), are the rates in use. Where different from rates in effect first half of 1903, they are lower. As in the case of outward rates the revenue to the railroad is 45 per cent of the entire revenue Panama to New York; so also with the following subdivisions of this fourth group, with the exception of bananas.

Timago and Buenaventura.—The revenue shown above is subject to claims for the Colombian drawback. The South Pacific carriers have not printed tariffs for many years to cover these ports, or any of the ports farther south. The principal rates at present in use, including those from Guayaquil, are shown by Exhibit W. (Memo, dated August 30.)

Other south Pacific ports include cargo from the minor ports of Ecuador (thus differing from the subdivisions outward), and the cargo from Peru and Chili is secured only after most active competition with the steamers coming via Magellan. We can hardly refer to any particular rates as in use, for we are being continually advised of "specials."

Bananas.—Our rate from the line of the road to New York is \$7.50 per ton (so-called), but just at present, because of low prices here, we have reduced it temporarily to \$6.75.

Way freight is governed by tariff dated Colon, September 15, 1902 (subject to 50 per cent drawback on produce of the Republic), and the special net silver tariff attached (Exhibit X). Some of these rates are lower than the proportions which come to us from the through tariff Europe to Panama, and it may now be advisable to revise these tariffs. We made no changes when we reissued the tariff in 1902, because the contract required notice to Colombian Government of changes. Colombia was continually imposing new taxes, and we felt that notice of readjustment, with possible increase of rates on some articles, might be made excuse for more taxes.

Mails.—National and State mails of Colombia (now limited to Panama) are carried free under Article XVI of our contract with Colombia. We are claiming 4 cents per pound for parcels. Mails of all other countries passing across the railroad and beyond the terminal pay for letters 22 cents per pound; newspapers, 8 cents per pound (except on mail, Panama to New York, 50 cents and 10 cents per pound, respectively, of which railroad is allowed 25 per cent). Parcels post has been subject to special arrangements, which we are now trying to put on a uniform basis of 4 cents per pound.

Treasure.—Through rates for specie, bullion, and other merchandise, carried ad valorem, are divided between the carriers in the same manner as shown on pages 1 and 2 for freight carried by the ton.

Baggage.—Local rate is 3 cents per pound, and each passenger with more than 15 pounds pays:

Going to or from Europe, pays railroad.....	Cents. 3
Between New York and Panama and ports south, pays railroads.....	2
Between New York and San Francisco and way ports, pays railroads.....	1½

Passengers.—Local tariff is (Exhibit Y), in effect August 1, 1904:

First class: Ten cents per mile, up to 12 miles (minimum, 15 cents); 9½ cents per mile, over 12 miles and not over 24 miles; 9 cents per mile, over 24 miles and not over 36 miles; 8½ cents per mile, up to 36 miles; ending with 5 cents or 0, by adding 2½ cents or over, dropping under 2½ cents; \$4 between Colon and Panama being maximum.

These rates are expressed in silver at \$1.25 premium, and second-class fares are half the silver fares. Through passenger rates pay the railroad, first class, \$10 gold; second class, \$5 gold, but include up to 200 and 150 pounds baggage, respectively, without extra charge. Besides the \$7,865 paying passengers mentioned on page 2, we furnished transportation free on Government account for 17,690 persons, under Article XIX of our contract made with Colombia.

Steamship line.—Freight statistics are based on New York arrivals and departures, so do not deal with precisely the same tons that cross the road in the same year, but eleven-ninths of the revenue of the railroad for any subdivision is the steamship revenue for the same division and period. Besides the through cargo, the steamers carried in 1903:

To Colon, 6,103 tons, average rate per ton, \$5.46; New York, 3,048 tons, average rate per ton, \$4.29.

Rates in effect at present from Colon to New York are as per memorandum dated June 1, 1903 (Exhibit Z). Rates from New York to Colon are shown in tariff No. 1, September 15, 1903 (Exhibit A).

Mails from New York pay sea postage according to law.

Letters, per pound, \$1.60; prints, etc., per pound, 8 cents; parcels, by agreement, per pound, 6 cents.

Closed mails from Europe, international postal allowance.

Letters, per kilo, francs, 2.52; prints, per kilo, francs, 92.

To New York.—Letters, per pound, 40 cents; prints, per pound, 8 cents.

When through from Panama or beyond, we allow steamship 75 per cent of the charge from Panama.

Letters, per pound, 37½ cents; prints, per pound, 7½ cents.

Passengers.—To Colon, 1,540; New York, 2,200.

Rates are shown in folder. To and from South Pacific ports they are the sum of rates to Panama and the rates beyond. To and from ports north of Panama the rates are governed more or less by overland competition, and we divide equally with Pacific Mail Steamship Company, apportioning to the railroad the regular fares; the remainder is credited to our steamship line. It may be noted (pages 9 to 11 in the folder) that through passengers to and from Europe via New York are charged a low scale, in order to compete with the steamers plying between Europe and Colon.

If the foregoing particulars are not clear or if further information is desired on the subject, I shall endeavor to supply the omission upon hearing from you.

Yours, truly,

— Traffic Manager.

EXHIBIT N 9.

WAR DEPARTMENT,
SPECIAL PANAMA RAILROAD COMMISSIONER,
Washington, January 24, 1905.

MY DEAR SENATOR: I notice, in some documents turned over to me by the Secretary of War, that on behalf of the shippers of Oregon you made a complaint last summer as to the contract which gave the Pacific Mail Steamship Company the exclusive right to through bills of lading from New York to San Francisco, Portland, and Seattle by the way of the Panama Railroad Company. In this letter you state that if it were not for this exclusive privilege enjoyed by the Pacific Mail Steamship Company, there would be competing lines running between Panama and the Pacific ports which would be greatly to the advantage of the merchants and shippers. I would be greatly obliged if you would forward me the addresses of any merchants and shippers who are interested in traffic by the way of the Panama Railroad, as well as the names and addresses of the operators of any independent steamship lines who may feel aggrieved as a result of this contract. I will be in New York until the latter part of this week, so you may address me there until Friday, care of the Manhattan Hotel; after that at 1123 Roanoke street, Washington, D. C.

Very truly, yours,

(Signed) J. L. BRISTOW,
Special Panama Railroad Commissioner.

Hon. CHARLES W. FULTON,
United States Senate.

EXHIBIT N 10.

UNITED STATES SENATE,
COMMITTEE ON CANADIAN RELATIONS,
Washington, D. C., January 25, 1905.

Hon. J. L. BRISTOW, New York, N. Y.

DEAR SIR: I am not, on short notice, able to give you the names of many firms who are engaged in commerce across the Isthmus of Panama and therefore interested in the freight rates of the railroad crossing the Isthmus. I refer you,

however, to Mr. W. A. Mears, who is secretary of the North Pacific Coast Jobbers and Manufacturers' Association. His address is Room No. 14, Newmarket Building, Portland, Oreg. Mr. L. A. Lewis, of Portland, Oreg., is president of the association, and Mr. J. S. Goldsmith, of Seattle, and Mr. C. H. Hyde, of Tacoma, Wash., are vice-presidents. This association is the one with which I had the most of my correspondence relative to the contract between the railroad company and the Pacific Mail Company, mentioned in my letter to which you refer. Mr. Mears will furnish all the information, I think, obtainable on the coast, or can inform you where you will be able to secure any particular information you desire. If you wish me to request Mr. Mears to correspond with you and furnish you any information within his power, I will gladly do so. If you desire me to take the matter up with Mr. Mears, kindly so advise me.

Very respectfully,

C. W. FULTON.

EXHIBIT N 11.

WAR DEPARTMENT,
SPECIAL PANAMA RAILROAD COMMISSIONER,
Washington, January 27, 1905.

MY DEAR SENATOR: Your letter of January 25 has been received, and I will take the matter up with the North Pacific Coast Jobbers and Manufacturers' Association at once, as suggested by you.

With kindest regards, I am, very truly, yours.

(Signed) J. L. BRISTOW,
Special Panama Railroad Commissioner.

HON. CHARLES W. FULTON,
United States Senate, Washington, D. C.

EXHIBIT N 12.

WAR DEPARTMENT,
SPECIAL PANAMA RAILROAD COMMISSIONER,
Washington, January 30, 1905.

MY DEAR SIR: In correspondence with Senator Fulton in regard to complaints made of the freight rates charged by the Pacific Mail Steamship Company and the Panama Railroad Company for business between Pacific coast ports and New York, he has referred me to you for detail as to these complaints. I would be pleased for you to give me any information that you may have in regard to the subject; and also state whether there are any other transportation companies or steamship companies doing business between the Pacific ports of the United States and Panama with which the Panama Railroad Company could enter into traffic arrangements that would be more advantageous to the shippers of the Pacific coast than the arrangements that now exist between the Panama Railroad Company and the Pacific Mail Steamship Company.

Please address your reply to me in care of Maj. Gen. George W. Davis, governor of the Canal Zone, Ancon, Republic of Panama, as I will sail one week from to-morrow, and your letter would not have time to reach me if addressed here before that date.

Very truly, yours.

(Signed) J. L. BRISTOW,
Special Panama Railroad Commissioner.

MR. W. A. MEARS,
Secretary North Pacific Coast Jobbers and Manufacturers'
Association, Room 14, Newmarket Building, Portland, Oreg.

This same letter sent this date to Mr. L. A. Lewis, president of the association, Portland; Mr. J. S. Goldsmith, Seattle, Wash.; Mr. C. H. Hyde, Tacoma, Wash.

EXHIBIT N 13.

NORTH PACIFIC COAST JOBBERS AND MANUFACTURERS' ASSOCIATION,
Portland, Oreg., February 7, 1905.

Mr. J. L. BRISTOW,

Special Panama Railroad Commissioner, Ancon, Republic of Panama.
(Care of Maj. Gen. George W. Davis, governor of the Canal Zone.)

DEAR SIR: I acknowledge yours of the 30th ultimo, stating that Senator Fulton had referred you to me for details as to complaints made of the freight rates charged by the Pacific Mail Steamship Company and the Panama Railroad Company for business between Pacific coast ports and New York.

I have to say in this connection that the through rates from New York to San Francisco via this line are based upon the transcontinental all-rail freight rates and western classification between same points, being respectively 20 per cent lower than the latter on carload shipments, and 30 per cent lower than the latter on less than carload shipments. As the transcontinental lines between New York and San Francisco, and the Isthmus line via Pacific Mail Steamship Company and the Panama Railroad Company between same points are supposed to be controlled by the same group of owners, and are operated under an agreement, it is plain that these rates via the Isthmus are so arranged that the difference in cost between that route and the all-rail route practically represents the longer time employed in the shipment, marine insurance, and risk of reshipping many times between ship, lighter, pier, and railroad, so that there may be really no competition between the two routes, the rates being dictated to the Pacific Mail Steamship Company by the transcontinental railroads.

A further evidence that there is now really no competition on this coast is the fact that although large steamers are being operated by the American-Hawaiian Line between New York and Pacific coast points around the Horn no attention is paid to them by the Pacific Mail Steamship Company, and no open reduction in rates is being offered.

It is the opinion of this association that were the contract between the Panama Railroad Company and the Pacific Mail Steamship Company abrogated (which contract, we understand, gives the latter absolute control of all goods passing over the Panama Railroad), the route would be thrown open to competition, and other lines would be allowed to compete, seeking to obtain equal privileges, which of course would tend to materially lower the through rate—a consummation which would result in great advantage to the consumers of the Pacific coast.

You ask me to state whether there are any other transportation companies or steamship companies doing business between the Pacific coast of the United States and Panama, with which the Panama Railroad could enter into traffic arrangements that would be more advantageous to the shippers of the Pacific coast than the arrangements that now exist between the Panama Railroad and the Pacific Mail Steamship Company. In answer to this will say that just at present we are not aware that there are any such companies now located on this coast, but we believe that there is more than one such on the Atlantic coast who, were the chance given, would gladly put into commission a fleet that could handle the business on both coasts fully as well as does the Pacific Mail Steamship Company. The fact that the Pacific Mail Steamship Company is protected by the Panama and the transcontinental railroads is sufficient reason why no other steamship line, either on the Atlantic or Pacific, have appeared to compete; but if competition is open we believe more than one such steamship line will appear.

In conclusion, I wish to state that I shall be glad at any time to furnish you with any information in my power regarding this subject.

Yours, respectfully,

W. A. MEARS, *Secretary.*

EXHIBIT N 14.

FRUIT GROWERS' LEAGUE, ROOMS 401-402 STIMSON BUILDING,
Los Angeles, Cal., June 17, 1904.

To His Excellency, THEODORE ROOSEVELT,
President of the United States of America.

SIR: The producers of California have long been under a handicap on account of the peculiar freight policy of the Southern Pacific Railroad and its

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MY DEAR
G. Walker,

allies. The Fruit Growers' League represents mainly the citrus industry, which ships from 20,000 to 30,000 cars of fruit per season, at \$326 freight per car, icing charges extra. These run from \$50 to \$75 per car. The freights are higher, and the service worse than it was ten years ago. We are looking for a means of escape. In the interest of the producers in this league I ask the following three questions:

(1) Will the Panama Railroad Company be available on equal terms with any other steamship line for a new steamship line carrying our fruit?

(2) Will steamers fitted up for this traffic have to be under the American flag?

(3) Will the rules, which we are informed now prevail permitting shipment via Panama of American products from one American port to another without the payment of duty, be applicable to fruit steamers?

Yours, respectfully,

(Signed) ABBOT KINNEY,
President Fruit Growers' League.

EXHIBIT N 15.

Mr. ABBOT KINNEY,

President Fruit Growers' League, Los Angeles, Cal.

JUNE 24, 1904.

SIR: I have the honor to acknowledge receipt by reference of your letter to His Excellency Theodore Roosevelt, President of the United States, containing inquiries respecting the treatment to be accorded California fruit and vessels loaded with such fruit at the ports and by the railway in the Canal Zone.

In response, permit me to say that the several matters involved in your interrogatories are now undergoing examination and consideration by the Commission, and when a determination has been reached you will be further advised.

Very respectfully,

(Signed) J. G. WALKER,
Chairman of Commission.

EXHIBIT N 16.

LOS ANGELES SATURDAY POST.

ABBOT KINNEY, EDITOR.

401-402 Stimson Building, Los Angeles, Cal., July 6, 1904.

Rear-Admiral JOHN G. WALKER, U. S. Navy,

Isthmian Canal Commission.

SIR: I have the honor to acknowledge receipt of your letter of June 24, advising me that I would be informed of the decision in regard to the management of the Panama Railroad in relation to the fruit traffic from California to the Eastern States. The tolls paid this year by the producers of oranges and lemons in southern California were something over \$10,000,000, including the charge for refrigeration. The Fruit Growers' League has been incorporated, with the main object of dealing with the traffic situation, which is unsatisfactory both as to charges, service, and the refusal of the railroad companies to recognize the rights of the growers to route their own shipments. The citrus industry is the only one which it has refused the right to route its product. We are deeply interested in changing the present traffic conditions, and will appreciate very much the information which you have promised to furnish us.

Yours, respectfully,

(Signed) ABBOT KINNEY.

EXHIBIT N 17.

WAR DEPARTMENT,

SPECIAL PANAMA RAILROAD COMMISSIONER,

Washington, January 30, 1905.

MY DEAR SIR: Under date of July 6, 1904, you wrote to Rear-Admiral John G. Walker, chairman of the Isthmian Canal Commission, complaining as to the

excessive freight charges for transportation of products of southern California to the Atlantic coast States. Will you please state in detail the nature of the complaints and your suggestion as to the remedy that might be applied in order that the subject may be given proper consideration in connection with the establishing of traffic arrangements between the Panama Railroad Company and Pacific coast transportation companies?

Please address your reply to me in care of Maj. Gen. George W. Davis, governor of the Canal Zone, Ancon, Republic of Panama, as I will sail one week from to-morrow, and your letter would not have time to reach me if addressed here before that date.

Very truly, yours,

(Signed) J. L. BRISTOW,
Special Panama Railroad Commissioner.

Mr. ABBOT KINNEY,
401 Stinson Building, Los Angeles, Cal.

EXHIBIT N 18.

ANCON, ISTHMIAN CANAL ZONE, March 15, 1905.

MY DEAR MR. BRISTOW: I inclose herewith a letter just received from Mr. Joseph H. Call, of Los Angeles, Cal. As it relates to a matter with which you are familiar and which is committed to your charge, I take pleasure in handing it to you.

Very sincerely,

G. W. DAVIS, Governor.

Hon. J. L. BRISTOW,
War Department, Washington, D. C.

LOS ANGELES, CAL., February 27, 1904.

Maj. Gen. W. DAVIS,
Governor of Canal Zone, Ancon, Republic of Panama.

SIR: On the 30th ultimo, Mr. Bristow, special Panama railroad commissioner, wrote to Mr. Abbot Kinney, of this city, concerning a complaint made by Mr. Kinney as to the monopoly of commerce between the Atlantic and Pacific ports passing via the Panama Railroad, and Mr. Bristow requested that Mr. Kinney's reply should be addressed to you, and on behalf of Mr. Kinney I beg leave to submit the following:

The Panama Railroad is now the property of and controlled by the United States, and is naturally a competing line for commerce with the transcontinental railroads between the Atlantic and Pacific ports.

It is understood that a contract exists between the Panama Railroad Company and Pacific Mail Steamship Company, in and by which the Pacific Mail is given exclusive rights to connect with the Panama Railroad, and to use its docks and wharves, and to receive and forward freight by water, and this contract operates to restrain trade and commerce between the Atlantic and Pacific Coast States, for the reason that the Pacific Mail Steamship Company is owned and controlled by the Union Pacific and Southern Pacific railroads, which latter roads practically control the commerce by land from California points to eastern points, and especially as to transcontinental business.

I understand that all of the existing acts of Congress, of a general nature, are binding upon all of the people of the United States and all of its officers and agents, and would therefore call your attention to the provisions of section 5 of the Interstate-commerce act of February 4, 1887, which prohibits, under severe penalties, the formation of any contract, agreement, or combination between common carriers, they being competing lines, for the pooling or division of earnings or freights, and also would call your attention to the provisions of the act entitled "An act to protect trade and commerce against unlawful restraints and monopolies," approved July 2, 1890, generally known as the "Sherman Act," which prohibits all contracts or combinations in the form of a trust or otherwise in restraint of trade or commerce among the several States, and which, by judicial construction of the Supreme Court, has been held in numerous cases to

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include railroads and other transportation companies engaged in interstate commerce.

The effect of the existing contract between the Panama Railroad Company and the Pacific Mail Steamship Company is to stifle commerce by water between Atlantic and Pacific ports, which is consummated by the high tariffs established for freights, and by excessive charges for wharfage and docks, and this exclusive contract prevents other freight lines engaged in water transportation from establishing through rates between Atlantic and Pacific ports, which can in any wise compete with the transportation by land.

In a recent case before the Interstate Commerce Commission, decided on the 24th instant, the Interstate Commerce Commission decided that there existed a pool and combination between the competing lines of railroad of the Southern and Central Pacific railroads on the one hand, and the lines of the Santa Fe system upon the other, for the division of earnings arising out of the citrus fruit traffic, which traffic is large, the annual freight paid to the railroads amounting to about \$11,000,000 per year.

If commerce were free by way of the Panama Railroad, it is claimed by those who have investigated the subject that 40 to 50 per cent of the freight would be saved to the growers of citrus fruit by shipping through Panama to Atlantic ports, instead of by railroad, and that the time in transit would not be longer than the time actually employed under present conditions by rail.

The gist of this complaint is that no exclusive contract should be made with any steamship company by the Panama Railroad Company, but that all commerce on the Atlantic and Pacific should be as free to one line of ships as to another, to the end that there may be fair and honest competition in freights between Atlantic and Pacific ports.

Yours, very respectfully,

JOSEPH H. CALL.

EXHIBIT N 19.

PORTLAND, OREG., August 11, 1904.

To the honorable the PRESIDENT OF THE UNITED STATES.

Washington, D. C.

DEAR SIR: We beg herewith to transmit to you copy of resolutions adopted by the Portland Chamber of Commerce, at a meeting held on the 9th instant.

Very respectfully,

SAMUEL CONNELL, *Secretary*.

Per M. MOSESSEHN, *Asst. Secretary*.

Whereas the United States Government, by the purchase of the Panama Canal, has obtained control of the Panama Railroad; and

Whereas for years past the Panama Company has entered into a contract with the Pacific Mail Steamship Company by which the latter handle all the freight destined to and from Pacific coast ports to the exclusion of all other ocean carriers; and

Whereas the purchase of the controlling interest in the Panama Railroad necessarily terminates said contract; and

Whereas it is understood that the Pacific Mail Steamship Company is now seeking to have said contract renewed; and

Whereas the renewal of said contract would again place the people of the Pacific coast entirely in the hands of the great railroad combinations, as far as charges for carrying freight are concerned, as the Pacific Mail Steamship Company is owned and controlled by the owners of what is known as the "Harriman Lines;" Therefore be it

Resolved by the Portland Chamber of Commerce, That it is not to the interest of the people residing west of the Rocky Mountains, nor of the people of the whole United States, that said contract be renewed, but that competition be thrown open to all ocean carriers to handle the freight to be shipped across the Isthmus of Darien, both between Atlantic coast ports and Colon, on the Pacific Ocean.

Be it further resolved, That a copy of these resolutions be forwarded to the Panama Canal Commission, to the President of the United States, and to each member of our Congressional delegation, Senators and Representatives.

W. J. BURNS, *President*.

SAMUEL CONNELL, *Secretary*.

Attest:

M. MOSESSEHN, *Assistant Secretary*.

EXHIBIT N 20.

WAR DEPARTMENT,
SPECIAL PANAMA RAILROAD COMMISSIONER,
Washington, January 30, 1905.

MY DEAR SIR: Under date of August 11, 1904, you transmitted to the President a copy of a resolution adopted by the Portland Chamber of Commerce, complaining of the traffic arrangements that exist between the Pacific Mail Steamship Company and the Panama Railroad Company for business between New York and Pacific coast ports of the United States. I would be glad if you would furnish me in detail information you have as to excessive charges for transportation of any kind by these companies; and also would be pleased to have any information you may be able to furnish in regard to any other steamship companies with which the Panama Railroad Company could make proper traffic arrangements that would be advantageous to the shipping interests of the Pacific coast.

Please address your reply to me in care of Maj. Gen. George W. Davis, governor of the Canal Zone, Ancon, Republic of Panama, as I will sail one week from to-morrow, and your letter would not have time to reach me if addressed here before that date.

Very truly, yours,

(Signed) J. L. BRISTOW,
Special Panama Railroad Commissioner.

MR. SAMUEL CONNELL,
Secretary Portland Chamber of Commerce, Portland, Oreg.

EXHIBIT N 21.

NEW YORK, August 15, 1904.

HON. WM. H. TAFT, Washington, D. C.

DEAR SIR: The Journal of Commerce of August 15 has an article in regard to the monopoly of the Pacific Mail Steamship Company and the Southern Pacific Railroad Company. Kindly advise me when the Panama Railroad Company will cancel its contract and end this monopoly. The American steamers are laid up for want of profitable employment, and such contracts as this are very detrimental to the American merchant marine. The quicker this monopoly is ended the more competition there will be for transcontinental business.

There have also been some foreign vessels chartered to carry coal for the Panama Railroad Company since it has been acquired by the United States Government. There have also been some foreign vessels chartered to carry supplies for the Panama Canal Commission. American vessels can not compete with these foreigners, and this would be a grand opportunity for the United States Government to give a little assistance to our American merchant marine.

Please send me a list of freight charges in force for carrying merchandise from Colon to Panama.

Yours, truly,

(Signed) LEWIS LUCKENBACHE.

EXHIBIT N 22.

TACOMA, WASH., August 9, 1904.

THEODORE ROOSEVELT,
President of the United States, Washington, D. C.

DEAR SIR: Resolutions, of which a copy is inclosed, were passed by the trustees of the Tacoma Chamber of Commerce and Board of Trade by unanimous vote at their regular meeting held Monday, August 8, 1904, and the undersigned instructed to forward you a copy.

Very truly,

TACOMA CHAMBER OF COMMERCE AND BOARD OF TRADE,
J. S. WHITEHOUSE, Secretary.

Whereas the United States Government, by its recent purchase of the Panama Canal, has acquired the control and practical ownership of the railroad operating between Aspinwall and Panama; and

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Whereas heretofore the said railroad has been leased to parties who have charged exorbitant rates and given exclusive privileges in the interests of other railroads and steamship corporations with whom they are allied; now

Therefore, be it resolved, That the Tacoma Chamber of Commerce and Board of Trade respectfully request the Panama Canal Commission to operate the said railroad themselves or in such way that the Government of the United States shall have direct and immediate control of its operation and that the said railroad be operated in the interest of all the people of the United States, open to all on the same terms and not in the interest of any class or corporation, and that fair and reasonable rates only be charged;

Be it further resolved, That copies of this resolution be forwarded to the Panama Canal Commission and to Theodore Roosevelt, President of the United States.

This is to certify that the above and foregoing resolution was duly and regularly passed by unanimous vote by the board of trustees of the Tacoma Chamber of Commerce and Board of Trade at its regular meeting held August 8, 1904, Tacoma, Wash.

W. E. BRONSON, *President*,
J. S. WHITEHOUSE, *Secretary*.

EXHIBIT N 23.

WAR DEPARTMENT.
SPECIAL PANAMA RAILROAD COMMISSIONER.
Washington January 30, 1905.

MY DEAR SIR: I find that under date of August 9, 1904, you forwarded to the President a resolution passed by the trustees of the Tacoma Chamber of Commerce and Board of Trade, complaining of the freight rates charged by the Pacific Mail Steamship Company and the Panama Railroad Company for transportation from ports on the Pacific coast to New York and from New York to said ports. I would be glad to have any detailed information as to the excessive charges referred to in such resolution and any information that you may have in regard to any other steamship lines with which traffic arrangements could be entered into by the Panama Railroad Company that would be an advantage to the shipping interests of the Pacific coast.

Please address your reply to me in care of Maj. Gen. George W. Davis, governor of the Canal Zone, Ancon, Republic of Panama, as I will sail one week from to-morrow, and your letter would not have time to reach me if addressed here before that date.

Very truly, yours,

(Signed) J. L. BRISTOW
Special Panama Railroad Commissioner

Mr. J. S. WHITEHOUSE,
Secretary Tacoma Chamber of Commerce and Board of Trade,
Tacoma, Wash.

EXHIBIT N 24.

SAN FRANCISCO, March 23, 1905.

To the Hon. J. L. BRISTOW,

Special Commissioner to the Panama Railroad.

SIR: The history of the North American Navigation Company of San Francisco demonstrates what can be done to relieve producers and shippers from unduly burdensome freight rates. The North American Navigation Company was an offshoot of the Traffic Association of San Francisco, organized in 1891 for the purpose of overcoming by united effort the inequality, unjust exaction, and discrimination of the transportation system then in effect, and to promote competition in the same field. In pursuance of these purposes a clipper line of ships around Cape Horn was first established, and proved an efficient regulator of rates on slow freight. The North American Navigation Company grew out of an extension of the same idea, and was designed to give San Francisco and the Pacific coast the benefit of geographical location by opening the sea route to the Atlantic coast by way of the Isthmus of Panama.

That sea route was closed then as it is closed now to competition. The Panama Railroad was under contract with the transcontinental railroads to make such rates as would discourage freight shipments by that route. The Panama Railroad and the Pacific Mail Steamship Company were paid a large monthly subsidy by the Transcontinental Association as a consideration for performing their part in this contract.

In 1892 the relations of the Panama Railroad and the Pacific Mail Steamship Company were broken off, and this fact came to the knowledge of the Johnson-Locke Mercantile Company, a shipping firm of this city. Negotiations were opened, and upon the suggestion of the Panama Railroad the Johnson-Locke Company undertook to raise funds to establish a steamship service on the Pacific Ocean between San Francisco and Panama, and the Panama Railroad Company on their part agreed to complete the connection with the Atlantic seaboard by a line of steamships between New York and Colon.

On this understanding the North American Navigation Company was incorporated. The Johnson-Locke Company undertook the expenses of promotion and after considerable effort subscriptions amounting to \$200,000 were pledged. In this work the navigation company had the hearty support and cooperation of the Traffic Association.

The first steamship of the new line sailed on March 9, 1893, and the cargo included wine, brandy, butter and vegetables, dried fruits, leather, varnish and paints, pickles, borax, herbs, silverware, plated ware, and furniture.

Immediately the transcontinental railroads declared a rate war, which for severity has rarely been equaled. This war finally succeeded in forcing the North American Navigation Company out of business, but the beneficial results due to its brief life may be understood from the annual report of Mr. J. S. Leeds, at that time manager of the Traffic Association, and now an official of the Santa Fe Company, located in Chicago. In his annual report made on October 24, 1894, Mr. Leeds said:

"For two out of the three years of the existence of this organization we have labored under a general business depression and decline in values of all property without a parallel in the history of California since the advent of railroad transportation, so that any benefits which have come from the reopening of the sea routes and the introduction of competition have been more than offset by the decline in value, so that the gain, instead of representing a profit as would have been the case under a normal condition, actually represent only so much less loss. It is therefore not possible to calculate with accuracy the full measure of the benefit which has come from the work of this organization. A fair estimate, however, would place the decline in the cost of transcontinental transportation by reason of the opening of the sea routes as competitors at not less than 40 per cent. Taking the business for the year 1892, which is the last period upon which any data are obtainable, the saving in cost of transportation would amount, for the eighteen months that vigorous competition has been in force, to not less than \$10,000,000 for the State of California—not to consider the benefit which has resulted by enabling the shippers and producers to dispose of much of the product of the State and transact a business which would otherwise have been impossible.

"The crop for the State for shipment for the years 1893 and 1894, except green fruit, has been marketed millions of dollars cheaper than any previous crop of like quantity. The fact that rates on green fruit were not reduced confirms the statement that the sea competition, introduced under the auspices of this association, produced this marvelous result.

"In addition to this, so far as the transportation expense fixes the value of merchandise, San Francisco merchants now have on hand the cheapest stock of goods they ever owned.

"This war of rates by the overland carriers against the reopening of the sea route has been more virulent, covers a longer period, and involved a larger sacrifice in revenue (based on old transcontinental rates) than any war in the history of railroad transportation of this country (based on a like volume of traffic). In fact the sacrifice they have made amounts to vastly more than would have been the possible total gross earnings of the steamship line had they been permitted to have absolute freedom to make any rate they desired and had ships sail with full cargoes in both directions on every voyage.

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"Transcontinental roads can not be relied on to supply this competition. If they did build into the territory or to the city of San Francisco, they are all

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heavily burdened, and at the same time they are all governed by the same instincts and the same interests which prompt the Southern Pacific to wage war on the sea line and sacrifice everything else to the long overland haul. They will never give their support and cooperation to the movement of the traffic on the line of the least natural resistance. If San Francisco is anything or possesses any element of superiority it is because it is a seaport and makes use of it."

What San Francisco and the Pacific coast want most of all is that the line of least natural resistance, the sea route, shall be open and kept open.

At the same meeting Mr. Isaac Upham, president of the Traffic Association, speaking of the period immediately preceding the organization of the North American Navigation Company, said:

"At that time the Transcontinental Association was ruling supreme and dictated the rates of freight on goods shipped and received from the East. The railroads were pooled against us; also the ships around Cape Horn, and the Pacific Mail was subsidized. We were paying \$4.20 per 100 pounds for first-class freight by rail, and \$15 per ton around Cape Horn."

The situation to-day does not differ greatly from that described by Mr. Upham. The Pacific Mail Steamship Company is owned by the Southern Pacific and holds an exclusive contract covering freight traffic with the Panama Railroad. The result is that the Southern Pacific Company fixes rates for Panamanian freights. The sea route is virtually closed to Pacific coast business. It is within the power of the national Administration to reopen it.

As matters stand the Pacific coast is deprived of its natural right to an open sea route by means of a contract expressly forbidden by the laws of the United States—a contract in restraint of trade and commerce between the several States and with foreign nations.

Mr. Leeds is recognized authority on transportation. His statement that the transcontinental railroads can not be relied on to compete will not be denied; yet competition is enjoined by law, and the Pacific coast asks the United States Government to take such measures as will open the way to that end.

The national Administration is already engaged in an experiment in Government ownership of a transportation line. It owns the Panama Railroad and must continue to operate it. It owns the steamship line between New York and Colon. The Examiner believes that it represents the opinion of a majority of citizens on the Pacific coast when it says that this experiment in national ownership should be given a fair chance of success by completing the line between United States terminals by means of a national steamship line from Panama to Pacific coast ports.

A bill introduced in Congress by Representative Hearst, of New York, provides machinery for carrying out the purposes here outlined, and among other things authorizes the Government to use any of the army transports it needed to complete the sea transportation service. The object of that bill is to compel the transcontinental railroads to make reasonable rates.

Respectfully,

THE EXAMINER.

EXHIBIT N 25.

NEW ORLEANS, LA., April 25, 1905.

Gen. J. L. BRISTOW,

Special Commissioner, Panama Canal Commission, Washington, D. C.

MY DEAR SIR: I take pleasure in inclosing letter from Doctor Souchon, president of our State board of health, which I trust will give you all the information needed in regard to our quarantine laws.

If I can be of any further service, please advise me.

Very truly, yours,

H. M. MAYO,
Secretary.

LOUISIANA STATE BOARD OF HEALTH,
New Orleans, April 25, 1905.

Mr. H. H. MAYO, *Secretary New Orleans Progressive Union.*

DEAR SIR: I have received yours of April 24, asking information regarding the operation of the quarantine system, showing expenses for fumigation, inspection, and every thing else connected with the operation of the system, such

Information being desired by Special Commissioner J. L. Bristow, of the Panama Commission.

In reply, I beg to submit the following statement:

There are six maritime quarantine stations operated by the Louisiana State Board of Health, viz. the Mississippi River Station, Port Ends Station, Rigolets Station, Atchafalaya Station, Calcasieu Pass Station, and Lake Borgne Canal Station. Of the foregoing only the two first, which are open all the year, are self-supporting. The remaining four are minor stations operated only from April 1 to November 1 and do not pay expenses.

The present scale of fees at the Mississippi River and Port Ends stations (under one management) is as follows:

Class.	Inspection fee.	Disinfection fee.
Steamships		
Ships	\$30.00	\$105.00
Barks	30.00	65.00
Brigs	20.00	50.00
Schooners (2-masted)	10.00	40.00
Schooners (3-masted)	7.50	25.00
Schooners (4-masted)		35.00
Steamboats (towboats excepted)	5.00	50.00

I inclose copy of the Quarantine Regulations for Mr. Bristow's information. The scale of inspection fees is authorized by law, with the proviso that when the revenue thereby yielded is in excess of the requirements of the service, the board shall make a suitable reduction. The law also contemplates the maintenance of a "quarantine fund," which was entirely exhausted in 1904, owing to extensive repairs to the quarantine tug and the erection of a new building at the Mississippi River Station, necessitating a temporary return to the full legal tariff of inspection fees. This was done August 30, 1904, and it was officially announced that as soon as practicable reductions would be made in said fees, which will probably be done during the present season.

It is admitted that the inspection and disinfection fees charged at the Mississippi River stations are somewhat higher than at certain other ports, but it is held that the remarkable dispatch with which vessels are handled fully compensates, as regards the saving of time effected, for the trifling additional expense.

A double force is employed, so as to expedite the work to the utmost, and the facilities of the station are such that several of the largest vessels can be handled at once. Of course, it requires a greater outlay to keep up this thoroughly efficient service, which is our plea for the scale of charges in force.

If any critic doubts the value in money of every hour saved an ocean steamship, that critic is respectfully invited to consult any experienced steamship master or agent. The Mississippi River Quarantine Station is 90 miles below New Orleans, and therefore the factor of timesaving cuts a much greater figure here than at ports where the quarantine ground is only a few miles distant from the city.

Placing myself at your disposal and that of Commissioner Bristow for any additional information, I beg to remain,

Very truly, yours,

EDMOND SOUCHON.

President Louisiana State Board of Health.

Uniform maritime quarantine regulations for the season of 1905. Adopted at the conference of health officials of Gulf States, held at Mobile, Friday, February 24, 1905. Ratified by the Louisiana State board of health and by the State health officer of Texas, February 24, and by the quarantine board of Mobile Bay, February 25, 1905.

Parties to the conference:

Dr. Rhett Goode, president quarantine board of Mobile Bay, chairman.

Dr. Edmond Souchon, president Louisiana State board of health.

Dr. Arthur Nolte, chairman quarantine committee Louisiana State board of health.

Dr. W. G. Owen, member Louisiana State board of health.

Dr. George
Dr. Henry
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Dr. George R. Tabor, State health officer of Texas.
 Dr. Henry Goldthwaite, health and executive officer quarantine board of Mobile Bay, secretary of conference.
 Dr. John N. Thomas, resident physician, Mississippi River quarantine station.

UNIFORM MARITIME QUARANTINE REGULATIONS FOR LOUISIANA, TEXAS, AND MOBILE.

PRINCIPAL YELLOW FEVER REGULATIONS GOVERNING VESSELS FROM TROPICAL PORTS.

Vessels from the following tropical ports shall be admitted without any disinfection or detention.

First. Ports of British and Spanish Honduras, Nicaragua, Porto Rico, and Bocas, provided no yellow fever develops at these ports during the quarantine season.

Second. Vessels engaged in traffic between Gulf ports and Cuban ports may be exempted from disinfection and detention at quarantine, provided that they comply with such regulations as the health officials, parties to this conference, deem necessary to impose at their respective ports. Passengers from Cuba (except Habana) must have certificates from a medical representative satisfactory to the parties to this conference, stating that sufficient time has elapsed from original point of departure to make them five days out at time of arrival at Gulf ports.

Third. Vessels from the following ports shall be disinfected and detained five days:

All Mexican ports.
 Port Limon (except fruit vessels)
 Colon.
 Rio de Janeiro.

All other infected ports, and ports hereinafter reported infected. If those vessels shall have been disinfected at the port of departure in compliance with the regulations of the respective health authorities, parties to this conference, then the period of transit from the last port to the quarantine station shall be counted in the five days.

Fourth. Vessels from all other tropical ports from which yellow fever has not been reported for the last two years shall be disinfected, but not detained.

Fifth. Vessels in good sanitary condition, not otherwise subject to quarantine, which have touched for coal or orders at tropical islands reported free of infectious disease, without taking on board at such islands either passengers or freight, will be allowed to pass without disinfection or detention, provided they shall sail from said port within twenty-four hours from arrival thereat, and they have been more than five days in transit from that port. The crews of those vessels not to go ashore at those ports.

Sixth. Vessels infected shall be disinfected and detained not less than seven days after the removal of the last case of yellow fever.

Seventh. The foregoing regulations do not apply to fruit vessels which operate under special regulations.

PRINCIPAL REGULATIONS GOVERNING NONINFECTED VESSELS FROM PORTS INFECTED WITH YELLOW FEVER, TO AVOID DETENTION.

First. At the infected ports the vessels shall be entirely under the supervision and jurisdiction of a medical officer accepted by each of the parties to this conference as concerns their respective ports.

Second. Just prior to leaving the port of departure the vessel shall be fumigated with sulphur. The vessel may be fumigated with sulphur on arrival at the quarantine station.

Third. The vessels shall not be detained upon arrival at the quarantine station if they have not been less than five days nor more than ten days in transit from the last port of departure.

Fourth. If they have been less than five days they shall be detained long enough to make five days from the hour of the fumigation at the port of departure; the five-day period may expire on arrival at city.

Fifth. If they have been more than ten days in transit they shall be fumigated at quarantine and detained five days thereafter. (If the vessel should have been in transit for a considerable number of days it is obvious that a case of yellow fever may have occurred and recovered, leaving the vessel infected and not affording any opportunity to the quarantine officer to determine same.)

Sixth. The medical officer shall give the captain a certificate stating that all the foregoing regulations have been complied with.

Seventh. The captain or agents shall furnish all the labor and materials deemed necessary by the medical officer.

Eighth. All expenses connected with the work, directly or indirectly, shall be paid by the owners of the vessels or the agents.

Ninth. The captain and agents of the vessels shall submit to these regulations or the vessels shall be detained at the quarantine station.

Tenth. Use 2 per cent of sulphur for two hours. Use 2 pounds for each 1,000 cubic feet. Close compartments tightly.

Eleventh. Vessels disinfected at the port of departure, but arriving at the quarantine station with yellow fever on board, shall be disinfected and detained not less than seven days.

PRINCIPAL REGULATIONS GOVERNING NONINFECTED FRUIT VESSELS FROM NONINFECTED FRUIT PORTS.

First. A resident medical inspector shall be stationed at fruit ports designated by the board.

Second. Vessels shall be subjected to no restrictions except inspection at the quarantine station.

Third. The fruit ports considered noninfected at present are Belize, Livingston, Port Barrios, Port Cortez, Ceiba, Bluefields, and Bocas.

Fourth. No passengers shall be allowed to embark at any fruit port (excepting Limon and Bocas) for Gulf ports unless said passengers have been two days in such port.

Fifth. Passengers may go from one noninfected port to another noninfected port without restrictions.

Sixth. Vessels may not be required to carry marine medical inspectors.

PRINCIPAL REGULATIONS GOVERNING NONINFECTED FRUIT VESSELS FROM INFECTED PORTS.

First. They shall all carry a marine medical inspector.

Second. Limon and Colon are considered infected.

Third. The vessels shall be fumigated with sulphur at the port of departure just prior to leaving, except the holds, if containing fruit.

Fourth. No vessel shall lie at the wharf at Colon or Limon longer than necessary to unload and load.

Fifth. They may carry passengers from Limon direct to the home port, if the passenger has previously remained five days in San Jose, provided vessels are five days in transit from last port.

Sixth. Crews shall be kept on board at infected ports. Also the passengers on board who have embarked at other ports.

Seventh. Only the captain or another officer of the vessel may go ashore to enter and clear his vessel, but only during daylight, and he shall return aboard immediately, without having gone anywhere else, especially into houses.

Eighth. Passengers from Colon and Limon shall not be required to be in the port two days before embarking.

Ninth. Vessels shall be fumigated with sulphur upon arriving at the quarantine station, except the holds, if they contain fruit.

Tenth. They shall not be detained if there is no suspicious case of sickness on board.

Eleventh. Sulphur shall be burned in holds of fruit vessels from infected ports after the discharge of cargo at port of arrival.

PRINCIPAL REGULATIONS GOVERNING INFECTED FRUIT VESSELS.

First. Fruit vessels which have left a port declared infected before the health authorities had time to place a medical inspector on board, or which shall be found infected upon arriving at the quarantine station, shall be disinfected, all persons aboard removed, except crew necessary to navigate vessel, and they shall be allowed to unload at the wharf in the city, or shall be detained until seven days have elapsed after the removal of the last case of fever, then permitted to proceed to the city.

Second. The vessel shall be under the supervision of the shipping inspector.

Third. The temperatures of all on board shall be taken twice daily for seven days.

QUARANTINE

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Given under my hand and seal of the Capitol in the city of Washington, D. C., this 10th day of March, 1900.

[SEAL.]

By the Governor of Mississippi.

Hereafter officers will be capable of.

S. D.

QUARANTINE PROCLAMATION FOR THE YEAR 1905—PUBLISHED BY THE LOUISIANA STATE BOARD OF HEALTH.

STATE OF LOUISIANA, EXECUTIVE DEPARTMENT.

At the request of the board of health of the State of Louisiana, embodied in a resolution adopted by that body at a regular meeting, held February 23, 1905, and by virtue of the authority vested in me by law, I, Newton C. Blanchard, governor of Louisiana, do hereby issue this, my proclamation, to take effect on and after the 1st day of April, 1905 (all vessels arriving at the mouth of the Mississippi River after 6 o'clock p. m., March 31, 1905, to be included).

That all vessels arriving at the several quarantine stations of Louisiana, together with their cargoes, crews, passengers, and baggage, shall be subjected to inspection and sanitation according to the following schedule:

First class.—Vessels which are not included in the following classes shall be subjected to necessary maritime sanitation without detention of either vessels or persons longer than may be necessary to place such vessel in good sanitary condition.

Second class.—Vessels arriving from suspected ports (Intertropical American and West Indian and Brazilian ports) which, in the absence of satisfactory information to the contrary, are considered suspicious, and other ports which may be decided suspicious by the board of health, shall be subjected to full sanitation at the Mississippi River quarantine station, together with detention of the vessel and persons for such length of time as the board of health may determine.

Third class.—Vessels arriving from ports known to be infected shall be subjected to full sanitation at the Mississippi River quarantine station and shall be detained for observation, together with their crews, cargoes, and passengers, for such length of time after completion of disinfection as the board of health may determine.

Fourth class.—Vessels, which without regard to ports of departure, are infected—that is to say, vessels which have yellow fever, cholera, or other contagious or infectious diseases on board at the time of arrival, or have had same on voyage—shall proceed at once to the lazaretto to land their sick, and they shall proceed to the Mississippi River quarantine station, there to undergo thorough disinfection and be detained, together with passengers, crews, and cargoes, for such length of time as the board of health may determine.

Vessels arriving from ports known or suspected to be infected with cholera or bubonic plague shall be subjected to maritime sanitation and such detention as the board of health may determine.

Vessels arriving from ports and places belonging to the second, third, and fourth classes, as set forth in the above schedules, shall not be allowed to pass the Rigolets, Lake Borgne Canal, Atchafalaya or Calcasieu quarantine stations, or other quarantine stations which may be hereafter established, without having undergone proper maritime sanitation at the Mississippi River quarantine station.

Vessels engaged in the tropical fruit trade, whose sanitary condition and health record are satisfactory, may be allowed to pass the Mississippi River quarantine station after inspection under such regulations and sanitary treatment as the board of health may prescribe.

Quarantine officers at the several stations of this State are especially charged and required to strictly enforce the articles of this proclamation.

The State board of health is requested to prosecute vigorously all violators of the same, as well as of the quarantine laws and regulations of this State.

Given under my hand and the great seal of the State of Louisiana at the capitol in the city of Baton Rouge, on this the 24th day of February, A. D. 1905.

[SEAL.]

NEWTON C. BLANCHARD,
Governor of Louisiana.

By the governor:

JOHN T. MITCHEL, *Secretary of State.*

RESOLUTION ADOPTED APRIL 24, 1895, AND STILL IN FORCE.

Hereafter full quarantine restrictions will be imposed on all vessels whose officers willfully attempt acceptance in regard to any cases of sickness or material capable of carrying infection, or willfully disregard the rules and regulations

S. Doc. 429, 59-1—25

of the board of health; and such detention will be imposed thereafter on every vessel on which any officer who has previously attempted to practice deception is found in any official capacity.

SPECIAL INSTRUCTIONS TO OWNERS, AGENTS, MASTERS OF VESSELS, AND PASSENGERS.

The Louisiana State board of health recommends the following suggestions to agents, owners, masters of vessels, and passengers, for the purpose of facilitating the work of quarantine officers and reducing the period of detention to a minimum:

1. That vessels should be stripped during the quarantine seasons of all woolen hangings, carpets, curtains, and such like materials, and upholstered furniture as far as practicable. Hair or moss mattresses to be replaced by wire or wicker beds.
2. That, as far as possible, vessels trading with tropical ports should be manned with acclimated crews.
3. Drinking water for use on vessels should not be taken from rivers or streams in intertropical countries.
4. Masters of vessels, ship and consular agents, are earnestly requested to instruct passengers from quarantinable ports to dispense, as far as possible, with baggage which may be injured by sulphur fumigation. Such risk of injury must be assumed by the owners of baggage.
5. While in ports infected with yellow fever, vessels should be anchored out in the harbor, when this is possible, and the crew prohibited from going ashore, especially at night. All on board should sleep under mosquito bars, and after leaving the infected port all mosquitoes on board should be destroyed. This can be done by burning sulphur for a few hours in each saloon, stateroom, fore-castle, or other closed places (not the holds, if the ship has cargo).
6. When practicable, cargoes should be loaded in such a manner as to allow access to the pumps, and also to enable the quarantine officers to pump out and wash the bilge.
7. For the purpose of avoiding delay and expense at quarantine, owing to the necessity of shifting of cargo for the object of disinfection, it is recommended that there be constructed in all vessels from quarantined ports an open framework shaft, 15 inches in diameter, from the center of each hatch, through which the fumigating pipe may be introduced down to the dunnage of the vessel.
8. Special attention should be given to cleanliness of vessels and persons, and provision should be made for all possible ventilation of the entire vessel. Instruction for using disinfectants can be obtained by application to the board of health or quarantine officers.
9. Masters should, before arrival, see that the bilge is thoroughly pumped out and cleansed, and that the entire vessel be put in such good sanitary condition as to permit of the least possible detention. Fruit vessels, particularly, should be kept thoroughly cleansed for the purpose of avoiding delay at the quarantine station.
10. Vessels observing the above recommendations will receive special consideration at the quarantine station, detention for the purpose of cleansing, disinfecting, etc., being materially lessened thereby.

G. FARRAR PATTON, M. D., *Secretary*.
EDMOND SOUCHON, M. D., *President*.

EXHIBIT N 26.

WAR DEPARTMENT,
SPECIAL PANAMA RAILROAD COMMISSIONER,
Washington, May 11, 1905.

MY DEAR MR. DRAKE: I would be glad if you would submit to me a brief statement as to the method that has been followed in the management of the real-estate property of the railroad on the Isthmus. Does the company own all of the land upon which Colon is located? Is the land leased to those who have erected buildings on it, or does the railroad own the buildings themselves? Will you please tell me all about how the railroad has managed its real estate and how much real property it owns at Colon and Panama? I want my report,

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which will be a permanent departmental record, to set forth a clear, concise, and complete story of the Panama Railroad Company and its operations.

Very truly, yours,

(Signed) J. L. BRISTOW.

Special Panama Railroad Commissioner.

MR. E. A. DRAKE,

Vice-President Panama Railroad Company,

24 State Street, New York.

EXHIBIT N 27.

PANAMA RAILROAD COMPANY,

New York, May 12, 1905.

HON. J. L. BRISTOW,

Special Panama Railroad Commissioner,

Washington, D. C.

DEAR SIR: I own receipt of your letter of the 11th instant, with reference to the management of the real-estate property of the company on the Isthmus, and in reply to the several specific inquiries therein, and the request for general information, beg to say that the management of the company's real-estate property on the Isthmus is in the hands of Mr. R. Yung, who acts in the double capacity of secretary to the superintendent and land commissioner.

Most of the real-estate records are on file in his office. We hold in this office the original deeds for lands purchased outright, and for right of way. Monthly report of real-estate earnings is made to this office, and a detailed statement of the condition of all properties, leases, and rentals is rendered quarterly and is on file here. It is voluminous and bulky in character. The list of properties being established, authority is given to the land commissioner to lease the properties at rentals established according to location.

Since 1891, because of extreme depression on the Isthmus, reduced payments on the scheduled rentals have been accepted in full settlement. As now arranged, the full rentals recited in the leases will be exacted from and after January, 1906, as it is expected that the company will be justified by that time in its requirement by improved business conditions on the Isthmus.

With the exception of three plots referred to hereunder, the company owns the island of Manzanillo in fee, by virtue of its purchase outright from the original owners. The exceptions are:

First. Two and one-half hectares, or about 10 acres, which was reserved to the ownership of the Republic of Colombia and the State of Panama by our contract of concession. This area is owned and occupied by the Republic of Panama at present.

Second. A plot on the beach front owned and occupied by the Pacific Mail Steamship Company for its wharf. This property was disposed of by sale outright to George Law in the early fifties.

Third. A plot on the beach front owned and occupied by the Royal Mail Steam Packet Company for its wharf, which is situated between this company's wharves Nos. 2 and 4.

The balance of the island, which is about 700 acres in extent, is divided into 3,600 lots, of which 900 are at present leased to different individuals, who have erected buildings on them.

The company owns approximately 34 buildings in Colon and a few buildings at La Boca and in the city of Panama. All other buildings erected on leased ground are owned by the tenants, except where they have been surrendered as not worth removal upon the expiration of leases for any reason.

The statute law of the Republic of Panama requires that the landowner must allow the tenant to remove any encumbrances from the land, or compels him to pay an appraised value for any permanent improvement at the expiration of the lease.

The company owns several acres of land in and about the city of Panama, 275 lots of which have been leased to different individuals.

The company owns land along the line of the road at the stations of Bohio, San Pablo, Empire, Culebra, Corozal, Guachapall, Santa Cruz, and Pueblo Nuevo, and has leased various plots to individuals occupying approximately 600 buildings or habitations they have erected.

The company's revenue from rentals in 1904 amounted to \$20,291.55 Colombian silver, subdivided \$17,378.80 from Colon properties and the balance from properties situated in the city of Panama and along the line of the road.

It has been the policy of the company to keep its buildings in repair, and in 1904 nearly \$25,000 was expended upon the buildings in Colon alone.

Carefully prepared maps of the company's properties are on file in this office, as are also specific details as to the tenants of and the revenue derived from each parcel.

If you so desire, I shall be pleased to furnish you somewhat more detailed information later, when the pressure on this office has eased a little.

Truly, yours,

E. A. DRAKE,
Secretary and Treasurer.

EXHIBIT N 28.

WAR DEPARTMENT,
SPECIAL PANAMA RAILROAD COMMISSIONER,
Washington, May 12, 1905.

MY DEAR MR. DRAKE: In examining the data which was furnished me by yourself, I have been unable to find any statement as to the division that was made between the European lines, the Panama Railroad Company, and the South American lines on business originating in New York and Europe destined for Panama and points south and on business originating in South America destined for New York and Europe. Will you please state what percentage of division is made? From the data furnished it appears that there is a minimum limit of 30 shillings per ton on freight from New York and Europe destined to points south of Panama. Is this correct?

Will you please send me, if you can, a copy of the contract of the Panama Railroad with each one of its connecting steamship lines?

Very truly, yours,

(Signed) J. L. BRISTOW,
Special Panama Railroad Commissioner.

Mr. E. A. DRAKE,
Vice-President Panama Railroad Company,
24 State street, New York.

EXHIBIT N 29.

PANAMA RAILROAD COMPANY,
New York, May 13, 1905.

Hon. J. L. BRISTOW,
Special Panama Railroad Commissioner,
Washington, D. C.

DEAR SIR: I own receipt of your letter of the 12th instant, and in reply to your inquiry beg to inclose memorandum which shows division of rates, which division, you will note, applies to the traffic both outward and homeward.

In reply to your inquiry concerning "a minimum limit of 30 shillings," I beg to advise you that authority is placed in the hands of initial carriers, both in Europe and on the west coast, to name rates down to a minimum of 30 shillings as necessary to secure the business, and lower rates can only be made effective by mutual agreement.

The minimum rate between New York and San Francisco is \$8 per ton of 2,000 pounds, or 40 cents per 100 pounds, and as in the case of the 30-shilling rate, any lower figure must be made the subject of special agreement.

We have no contracts with any of the lines on the Atlantic, our relations with them being in the form of working arrangements "to maintain existing practices," and these are covered by correspondence and are terminable upon ninety days' notice from either party.

I believe you have a copy of our contract with the Pacific Mail Steamship Company, but I am sending you a duplicate.

I also inclose typewritten copies of the last agreements made with the Pacific Steam Navigation Company and the Compania Sud-Americana de Vapores. You will please note that the contract with the Pacific Steam Navigation Company was terminated by this company and later replaced by a working arrangement, which is covered by an exchange of letters. Both of the above are now terminable upon ninety days' notice.

The contract with the Pacific Mail Steamship Company, as you are aware, will expire by notice already given from this company on July 12 next.

Truly, yours,

E. A. DRAKE, *Secretary and Treasurer.*

Division of rates between Europe and west coast of America and vice versa.

	Atlantic Line.	Panama Railroad Company.	Pacific Line.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Panama ^a	45	55	
Central America	41½	23½	35
Mexico	37½	25	37½
San Francisco	35	24½	40½
South Pacific	41½	25	63½

^a On cargo, Panama to Europe, railroad gets arbitraries as per attached Tariff F.

^b See note below.

Division of rates between New York and west coast of America and vice versa.

	Atlantic Line.	Panama Railroad Company.	Pacific Line.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Panama	55	45	
Central America	55 of 60	45 of 60	40
Mexico	55 of 60	45 of 60	40
San Francisco	55 of 50	45 of 50	50
South Pacific	55 of 62	45 of 62	38

N. B.—On homeward cargo from Buenaventura and Tumaco to Europe, instead of a percentage division the Panama Railroad Company gets the following arbitraries:

	Through rates.	Per ton.
	<i>s.</i>	<i>d.</i>
Cocoa and coffee	80 and 5	27 0
Rubber, tobacco, hides, and skins	100 and 5	40 0
Togau	45 and 5	17 6
Merchandise	120 and 5	48 0

NOTE.—Division of balance of rates between Pacific and Atlantic lines not known.

NOTE.—Prior to November 3, 1903, half of the arbitraries accruing to the Panama Railroad Company was returned to Colombian shippers, according to contract.

JANUARY 16, 1905.

EXHIBIT N 30.

PANAMA RAILROAD COMPANY,
New York, May 31, 1905.

Hon. J. L. BRISTOW,

Special Panama Railroad Commissioner,

Washington, D. C.

DEAR SIR: With reference to the copies of letters which we sent you on the 24th instant, we have thus far received replies from the Southern Pacific Company and from the Central of Georgia Railway Company.

The former advises us that the

"Rate on cotton, raw, machine compressed, is uniformly \$1.35 per 100 pounds from Mobile, Ala., Jackson, Miss., Memphis, Tenn., and Dallas, Tex., to China and Japan ports of call. The rate from Atlanta, Ga., would make on New Orleans combination, and would be, I understand, 49½ cents per 100 pounds higher than the rates from other points."

Mr. Estes writes:

"There are no rates on cotton from Atlanta, Ga., to Chicago and St. Paul. The rate to Manchester, N. H., is 66½, and to Lowell, Mass., 66½ cents per hundred pounds."

Yours, truly,

R. L. WALKER,
Traffic Manager.

EXHIBIT N 31.

PANAMA RAILROAD COMPANY,
New York, June 3, 1905.

Hon. J. L. BRISTOW,
Special Panama Railroad Commissioner,
Manhattan Hotel, New York.

DEAR SIR: Complying with your verbal request, I herewith submit some memoranda which I jotted down April 16, as I read the full text of the address to the Secretary of War, April 8 last, by ministers of various countries of Central and South America.

Page 12: The railroad transit is on an equitable and liberal basis.

Page 13: The Panama Railroad Company wants nitrates, but the Pacific Steam Navigation Company is unwilling to work the necessary rates via the Isthmus.

Panama Railroad Company wants sugar, suggested 25 shillings per ton via the Isthmus; Pacific Steam Navigation Company would not spare time to load.

Cocoa pays to Europe 60 shillings via Panama. Pacific Steam Navigation Company advanced the rate to New York \$17 (68 shillings) against our judgment some two years ago, and we are now insisting upon a reduction to 60 shillings.

The line of steamers operating via Magellan must always carry coffee at lower rates than those of the Isthmus route, or retire from the field, higher insurance and longer time against the Straits route, which can operate cheaper than the Isthmus route.

We have never been approached about the movement of tin from Bolivia. Would Chile and Peru allow it to cross their territory without tax?

Years ago cotton was carried by Pacific Steam Navigation Company via Magellan to Liverpool and thence to New York. On our complaining it was explained that the opportunity for selling in Liverpool or forwarding to New York if market here proved better was the occasion. More recently cotton has been coming to us from Peru on through bills of lading to Liverpool via New York.

We have known of ivory nuts having been shipped in sailing vessels from Ecuador to Hamburg at very low rates of freight; that large stocks were thus accumulated there; that afterwards Ecuador imposed an export duty on ivory nuts, thus placing the Hamburg syndicate at an advantage over later exporters from Ecuador. Low rates at times prevailing from Hamburg to New York have undoubtedly induced shipments of ivory nuts to this market.

We have known steamers from Liverpool to New York to accept shipments of salt at a rate of 1 shilling per ton rather than buy ballast. No reasonable reduction of Isthmus rates could combat such trade conditions.

Quarantine established by the United States officials at Panama against bubonic plague caused shipments of hides and coca leaves to move from Ecuador and Peru via Europe to New York. The question of lower freight rates did not control the business to Europe, as charged by the ministers.

The railroad tariff rates do not affect the through rates in any way. Neither does the railroad in any case receive 33 per cent for the railroad haul. The percentage varies from 23½ to 25 per cent on traffic between Europe and the ports north and south of Panama. Any reduction by the railroad for the Isthmus transit would in the nature of things go to steamship lines forming a through line without reducing rates to shippers. (That our proportion is not excessive is proved by the fact that in later years our expenses have been maintained at a minimum, and that net profits have not been extraordinary.)

Page 14: Rice from Hamburg to Ecuador via Panama is charged 40 shillings per ton, not 30 or 33 shillings, as stated. From New York to the ports of the south

Pacific classification of freight has been in use different from that in effect from Europe. We did not notice the difference in the rate on rice. Evidently the rate has not governed the movement, for quantities of rice have come to New York from Germany, have been transferred at this port in bond, and paid us 60 cents per 100 pounds, New York to Ecuador. From a transportation standpoint it is inexplicable why rice should pay freight Hamburg to New York, expenses in New York, and 60 cents per 100 pounds New York to Ecuador, when the rate Hamburg to Ecuador by the Isthmus route was only 43 cents per 100 pounds.

Last July the lines working from Europe via Magellan and the lines working via the Isthmus to Chile and Peru agreed to establish a new and uniform classification. The new publication recently came to hand, and our form is in the hands of the printer (made effective from New York May 23).

It is the custom for all lines running to the west coast of Central and South America to charge bulky freight on a measurement basis. If oil stoves were shipped in parts the freight would be much less and the vessels would have the room for other cargo. That the bulky stuff pays a high freight indicates that it is cheaper to pay for the excessive space on the steamers than to set up the stoves at the point where they are to be used. If the cost of the stoves at destination is 42.66 per cent more than at shipping point, the mere fact does not prove the freight rates unreasonable for the service performed.

Page 15: It is stated that the freights from Hamburg would have been one-third as great. This is not so. The comparison (in cents per cubic foot) is:

Hamburg to Ecuador	24½
Hamburg to Peru	27½
New York to Ecuador	30
New York to Peru	37½

Under the new tariff it is proposed to make the rates the same.

The through rates are not based upon tariff of the steamship line New York to Colon. They were made to compete with the steamers sailing from New York via Magellan. Rates made New York to Panama would not necessarily affect rates beyond if the on-carrier is free to add thereto his own tariff.

The two steamship lines operating in connection with the Isthmus to the south of Panama have had no exclusive connection since September last; the exclusive connection to the north expires in July.

The doors at Colon have not been closed to any steamship line for years. On the contrary, it has been the railroad company's policy to encourage lines from more ports, witness Prince Line from Glasgow and Antwerp, La Veloce from Mediterranean, Austro-Americana from Adriatic, and United Fruit Company from New Orleans.

No steamer has gone to Colon with cargo for transshipment to a carrier from Panama. Many vessels have gone there with cargo for the Isthmian Canal Commission, and every one has had the first available berth at which to discharge in the order of arrival. The cargo has been shipped from the wharves as fast as the available rolling stock would admit, and the charge that the Panama Railroad willfully hinders the movement of traffic is without foundation.

One reason that the Pacific Steam Navigation Company and the Compania Sud-Americana Vapores were forced to abandon the route to the north of Panama was their absolute inability to perform the service of the extended line. The traffic of the Isthmus fell off, and a proverb on the west coast was that "things were as uncertain as the connection at the Isthmus."

Page 16: As to passenger rates, the fare from New York to Colon, \$75, is the same as to other ports in the West Indies. The distance is 1,975 miles. The Pacific Steam Navigation Company, Panama to Callao, 1,569 miles, charges \$107. Peru should look to the steamers touching her own ports for the first reduction.

That the companies do not lose money in carrying passengers New York to San Francisco at \$105 is due to the fact that the few passengers carried at that figure do not increase the cost of carrying the business for which provision is made to Central and South America.

Continuing this subject as of to-day, I note on page 17 a reference to a charge of 45 cents a pound for mail crossing the Isthmus. The rate is, and has been for years, 22 cents per pound for letters and 8 cents per pound for newspapers, charged on net weights. I understand that the letter rate that is allowed by the International Postal Union for the transit of each country in the Union is 5 francs per kilogram, say twice our charge. Our rate for letters from Panama to New York is 50 cents per pound, i. e. only 10 cents more than the Postal Union allows between Colon and New York (5 francs per kilo).

Every government addressing us regarding parcels post has been quoted the same rate—4 cents per pound for Isthmus transit and 6 cents between Colon and

New York, reasonable charges if the service is not to be gratuitous in exchange for some governmental concession.

Touching once more upon the comparison of rates from New York and from Germany, please note that the Hamburg-American Line working via the Isthmus publishes a tariff which compares with the rates from Europe via Magellan, as follows:

Rates per ton from Europe.

To--	I.	II.	III.
	s. d.	s. d.	s. d.
Valparaiso and Group, via Magellan.....	50 0	42 6	35 0
Valparaiso and Group, via Panama.....	50 0	42 6	35 0
Callao and Group, via Magellan.....	55 0	47 6	40 0
Callao and Group, via Panama.....	57 6	50 0	42 6
Payta and Group, via Magellan.....	60 0	52 6	45 0
Payta and Group, via Panama.....	60 0	52 6	45 0
Guayaquil, via Magellan.....	45 0	40 0	35 0
Guayaquil, via Panama.....	60 0	45 0	40 0

We were prepared in March to put in the same figures via the Isthmus from New York, but delayed action pending the election of the new board. As per above parenthesis, we made the rates effective from New York May 23, but on weight goods the charge from New York is somewhat higher than from Europe, our ton being 2,000 pounds and theirs 2,240. On measurement goods, which form the bulk of the traffic, the rates are the same. Our tariff is inclosed herewith for your information. I gave Mr. Watson the European tariff yesterday.

Another illustration of how rates do not control shipping routes and markets is furnished by the following quotation from a report sent to us by Mr. Cahill when off Guayaquil, September 14, 1903:

"I regret to say that there is a falling off in the shipment of hides to New York, even from Guayaquil and Payta, shippers alleging that the classification to which hides are subjected causes them loss; a small percentage of nearly every lot is put in the category of 'glue' hides, for which only a low price is paid. Mr. Kauffmann, of Pacasmayo, who has been an enthusiastic shipper to New York, told me that he has been compelled to drop the business. Complaints are also made that the United States custom-house puts an arbitrary value on hides, for the collection of duties, disregarding the valuation placed on them by consular agents.

* * * * *

"Almost all the skins from Payta continue going to New York, an occasional little lot only going to France. It seems rather strange that nearly all the skins are shipped from Guayaquil to Payta, for reshipment to New York; presumably the prestige of the Payta skins is sufficient to make up the difference in freight.

"Hide shipments to European markets from Guayaquil and Payta go almost exclusively via Panama, but from lower Peruvian ports they go mostly by the Straits, the rate by which latter has recently been increased to £4, the same as is charged via Panama."

It has always been my personal opinion that the Isthmus route should have kept the door open at Panama in the same manner as at Colon, to be in position to attract additional lines when those in operation did not meet all requirements. To this extent I agree with the ministers, but Colombia and Ecuador, and in a lesser degree Peru and Panama, could stimulate our business by modification of consular charges and onerous conditions regarding certification of manifests.

Yours, truly,

R. L. WALKER, Traffic Manager.

EXHIBIT N 32.

PANAMA RAILROAD COMPANY.
New York, June 7, 1905.

Hon. J. L. BRISTOW,
Special Panama Railroad Commissioner,
No. 1800 F street NW., Washington, D. C.

DEAR SIR: Will you please refer to the seventh page of my respects of the 3d instant, and cut out the following sentences:

"I understand that the letter rate that is allowed by the International Postal Union for the transit of each country in the Union is 5 francs per kilogram, say twice our charge. Our rate for letters from Panama to New York is 50 cents per pound, i. e., only 10 cents more than the Postal Union allows between Colon and New York (5 francs per kilo.)."

The facts are, as called to your attention this morning, that the Universal Postal Union, Article IV, provides:

"The correspondence exchanged, whether in open or in closed mails, between two administrations of the union, by means of the services of one or of several other administrations of the union, is subject to the following transit charges, to be paid to each of the countries traversed, or whose services participate in the conveyance, viz:

"First. For territorial conveyance, 2 francs per kilogram of letters or post cards, and 25 centimes per kilogram of other articles.

"Second. For sea conveyance, 15 francs per kilogram of letters or post cards, and 1 franc per kilogram of other articles.

"It is, however, understood—

* * * * *

"Second. That wherever the rate of sea transit is at present fixed at 5 francs per kilogram of letters or post cards and at 50 centimes per kilogram of other articles these rates are maintained.

Thus the charges allowed by the Postal Union are, say, 18 cents per pound for letters and 2.3 cents per pound for other matter, against our railroad charges for traversing the territory of the country of Panama of 22 and 8 cents, respectively. Parcels post is not dealt with by the Universal Postal Union.

The Postal Union allowing for territorial transit, letters 13 cents, prints 2.3 cents; for sea transit Colon to New York, letters 44 cents, prints 4.4 cents. Total, letters 62 cents, prints 6.7 cents. Our present charges are less for letters and more than the minimum for papers than the rates of the union.

Yours truly,

R. L. WALKER, *Pacific Manager*

EXHIBIT N 33.

CAYAHUIL, ECUADOR.

Some 24,000 tons of cocoa form about 75 per cent of the exports through Guayaquil, the main port of Ecuador.

Most of the cocoa is brought down on the river steamers, some of which are owned by the planters, so that it would be difficult to determine the charge for the haul.

The export duties on cocoa per 100 pounds are \$3.70 local currency, equivalent, roughly, to \$1.85, or per 100 pounds 2,240 pounds, \$41.44 American currency. Lighterage 60 cents American currency. Port dues on a steamer of 2,000 tons register amount to 1,000 sucres, more or less, or, say, \$500 American currency. Some steamers are exempted by contract from this charge. Assuming that a steamer handles in and out 500 tons, bringing 250 tons and taking away an equal quantity, which I believe is above the average, the rate on cocoa would be about \$1 per ton American currency, against \$17 to New York and \$15 to Europe via Panama, making a total of \$43.04.

No wharfage on exports; on imports Government wharf charges are about \$1 per ton, measurement.

CARILL.

WASHINGTON, D. C., June 12, 1905.

EXHIBIT O 2.

TARIFF No. 2—NEW YORK TO PANAMA.

(Supersedes conflicting rates of earlier date.)

PANAMA RAILROAD COMPANY—PANAMA RAILROAD STEAMSHIP LINE.

Tariff of freight rates from New York to Panama.

[Taking effect July 20, 1905. 24 State street, New York.]

Commencing with shipments from New York, July 20, 1905, the following rates will apply per cubic foot or per 100 pounds, at option of carriers:

Classes:

D. Per cubic foot.....	\$1.12
Per 100 pounds.....	2.24
1. Per cubic foot.....	.56
Per 100 pounds.....	1.12
2. Per cubic foot.....	.32
Per 100 pounds.....	.64
3. Per cubic foot.....	.28
Per 100 pounds.....	.56
4. Per cubic foot.....	.22
Per 100 pounds.....	.44
Minimum.....	4.00

Subject to the following exceptions:

Beans, flour, onions, peas, potatoes, rice, soap, on weight basis.....	Class 4
Flour (in 10-ton lots), per 100 pounds.....	\$0.35
Gunpowder, in metallic kegs.....	Class D
Lumber (not exceeding 20 feet in length), per M foot B. M.....	\$15.00
Pitch, tar, rosin, cement, per 100 pounds.....	.30
Refined petroleum, in lots of 250 cases, per cubic foot.....	.22
Refined petroleum, in smaller lots, per cubic foot.....	.40
Parcels, not exceeding 2 cubic feet, each.....	2.00
Treasure, on value, three-fourths of 1 per cent.	

RULES AND CONDITIONS OF SHIPMENT.

All freight must be prepaid in United States gold.

No bill of lading signed for less than minimum charge.

All packages of unusual bulk or weight will be taken only by special agreement.

Owner's risk.—Oils and other liquids are taken only at owner's risk of leakage.

Glassware, crockery, and all fragile property concealed in packages, only at owner's risk of breakage.

All perishable property only at owner's risk of frost, heat, and decay.

Dynamite and high explosives of any kind not carried.

Refined petroleum taken only when put up in tin cans, boxed, and marked as required by United States law.

Shippers must comply with all consular regulations for manifests, invoices, certification, etc., and any fine imposed by authorities at port of destination, or damage resulting from failure in this respect, or for errors or omissions therein, shall be at the risk and expense of the consignees of the goods, and shall be paid by them.

Steamers sail from Pier 57, North River, New York City, every five days (Sundays excepted), receiving freight up till noon on the previous day, unless sooner full.

OVERSIZE FOLDOUT(S) FOUND HERE IN
THE PRINTED EDITION OF THIS VOLUME
ARE FOUND FOLLOWING THE LAST PAGE
OF TEXT IN THIS MICROFICHE EDITION.

SEE FOLDOUT NO 2



Exhibit O 15.
Tenth No. 1 To 2 in Pym's Port

Tariff of freight rates from New York to ports in Republic of Colombia, Ecuador, Peru, and Chile—Continued.

	Ports of—					
	Buenaventura.	Quaqueval.	Tumbes.	Huacho.	Payta.	
	Tumaco.	For Bolivar	Elqui.	Lambayeque Morn.	Peru.	Calela Buena.
	Esmeraldas.		Chimbo.	Leunas.	Salaverry.	Yaque.
	Bahia.		Chumbuco.	Chad.	Calera.	Tacopilla.
	Manila.		Sancti.	Quila.	Cerro Azul.	Cota.
	Cayo.		Cosma.	Talca.	1880.	Amargosa.
	Bellena.		Supa.	Chatal.	Mollendo.	Caldera.
				Carri.	Illo.	Rosario.
					Arca.	Cochab.
					Prisaga.	Valparaiso.
						Talcahuano.
Beef, butter, caustic soda, cheese, iron (bar, hoop, sheet, and galvanized), iron pipe (in 6 inches diameter), lard, nails, points, pork, rice, wire (iron, brass, copper, or barbed).	75 cents per 100 pounds.	60 cents per 100 pounds.	75 cents per 100 pounds.	30 cents per 100 pounds.	30 cents per 100 pounds.	
Matches (in tin-lined cases).	50 cents per cubic foot.	37 cents per cubic foot.	30 cents per cubic foot.	30 cents per cubic foot.	30 cents per cubic foot.	
Flour (in bags or barrels), bricks, cement, grease, rosin, tallow, tar.	45 cents per 100 pounds.	45 cents per 100 pounds.	45 cents per 100 pounds.	45 cents per 100 pounds.	45 cents per 100 pounds.	
Metallic cartridges.	\$1.50 per 100 pounds.	\$1.50 per 100 pounds.	\$1.50 per 100 pounds.	\$1.50 per 100 pounds.	\$1.50 per 100 pounds.	
Refined petroleum in cans, boxed.	30 cents per cubic foot.	25 cents per cubic foot.	25 cents per cubic foot.	25 cents per cubic foot.	25 cents per cubic foot.	
Cans.	80 per 100 pounds.	80 per 100 pounds.	80 per 100 pounds.	80 per 100 pounds.	80 per 100 pounds.	
Plated ware and silverware, jewelry, watch, revolvers.	50 cents per cubic foot and 1 per cent on value.	50 cents per cubic foot and 1 per cent on value.	50 cents per cubic foot and 1 per cent on value.	50 cents per cubic foot and 1 per cent on value.	50 cents per cubic foot and 1 per cent on value.	
Gold and silver coin, bars, or dust, precious stones, &c.	1 per cent on value.	1 per cent on value.	1 per cent on value.	1 per cent on value.	1 per cent on value.	
Parcels (per cubic foot or fraction of a foot).	\$2.50.	\$2.50.	\$2.50.	\$2.50.	\$2.50.	

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EXHIBIT O 4.

[Superseding conflicting rates of earlier date.]

PANAMA RAILROAD COMPANY—PANAMA ROUTE.

PANAMA RAILROAD STEAMSHIP LINE, PANAMA RAILROAD, PACIFIC STEAM NAVIGATION COMPANY, AND COMPAÑIA SUD-AMERICANA DE VAPORES.

Rates of freight to Central American ports.

Commencing with shipments from New York, December 18, 1900, the following rates will apply per ton of 40 cubic feet, or 2,000 pounds, at steamer's option:

To—	Classes.					Special (on 5-ton lots of fourth-class freight).	Minimum.
	D.	1.	2.	3.	4.		
Punta Arenas.....	\$18.00	\$28.00	\$20.00	\$20.00	\$15.00	\$10.00	
San Juan del Sur.....							
Corinto.....							
Amapala.....							
La Union.....							
La Libertad.....	18.00	32.00	20.00	20.00	15.00	12.40	\$5.00
Acajutla.....							
San Jose de Guatemala.....							
Champerico.....							

Subject to the following exceptions:

To Punta Arenas—

Flour.....	per 100 pounds..	\$0.50
Refined petroleum.....	per cubic foot..	.25
Barbed wire.....	per 100 pounds..	.50
Rosin.....	do.....	.50
White and yellow pine lumber.....	per 1,000 feet B. M..	20.00
Parcels, not exceeding 2 cubic feet.....	each..	2.50

To other Central American ports—

Flour.....	per 100 pounds..	.50
Refined petroleum.....	per cubic foot..	.35
Rosin.....	per 100 pounds..	.50
White and yellow pine lumber.....	per 1,000 feet B. M..	24.00
Parcels, not exceeding 2 cubic feet.....	each..	3.00

EXHIBIT O 5.

MEXICAN FREIGHT TARIFF No. 2.

[Superseding conflicting rates of earlier date.]

PANAMA ROUTE—PANAMA RAILROAD STEAMSHIP LINE, PANAMA RAILROAD, PACIFIC STEAM NAVIGATION COMPANY, AND COMPAÑIA SUD-AMERICANA DE VAPORES.

Tariff of freight rates from New York to Mexican ports.

[Taking effect April 16, 1901. Subject to change without notice.]

Commencing with shipments from New York, April 16, 1901, the following rates will apply per ton of 40 cubic feet, or 2,000 pounds, at steamer's option:

To—	Classes.					Special (on 5-ton lots of fourth-class freight).	Minimum.
	D.	1.	2.	3.	4.		
Acapulco.....	\$50.00	\$36.00	\$22.80	\$20.40	\$16.80	\$13.20	\$5.00
Manzanillo.....							
San Blas.....							

REPORT OF JOSEPH L. BRISTOW.

Beer, glassware (except cut), oakum, shooks.....	per ton..	\$12.00
Brushes, boots and shoes, refined petroleum	do.....	15.00
Cotton piece goods	do.....	18.00
Parcels, not exceeding 2 cubic feet	each..	3.00

Rates to Mazatlan (on a weight basis) will be those of Transcontinental West-Bound Tariff No. 1-4, effective January 18, 1904, and supplements thereto.
New York, April 5, 1904.

EXHIBIT O 6.

SAN FRANCISCO RATE CIRCULAR NO. 7.

(Supersedes conflicting rates of earlier date.)

PANAMA ROUTE—PANAMA RAILROAD STEAMSHIP LINE, PANAMA RAILROAD.

Tariff of freight rates from New York and common points to San Francisco.

[Taking effect January 26, 1904. Subject to change without notice.]

[Class rates. Subject to the Western classification. In cents per 100 pounds.]

1	2	3.	4	5.	A.	B.	C.	D.	E.
180	150	130	115	105	105	85	80	80	70

Commodity rates from New York will be those of transcontinental west bound tariffs in effect at time of shipment less the following discounts:

Carloads, 20 per cent; less carloads, 30 per cent; observing minimum of 40 cents per 100 pounds.

Minimum charge for any single shipment will be \$3.

Subject to the following exceptions from New York:

Oil (not petroleum) in barrels or cases in carloads, minimum weight 24,000 pounds (calculated on actual gross weight), 50 cents per 100 pounds.

When through rates are 60 cents per 100 pounds or over via the Panama route they will apply from interior points, provided the local freight charges to New York plus transfer do not exceed 20 cents per 100 pounds, and provided further that all shipments from points outside of New York City are consigned to the care of Panama Railroad Steamship Line, 24 State street, New York.

In addition to the regular transportation charges provided above, shipments are subject to toll levied in San Francisco by the State of California.

New York, January 10, 1904.

EXHIBIT O 7.

TARIFF NO. 6—N. P. C.

(Supersedes conflicting rates of earlier date.)

PANAMA ROUTE—PANAMA RAILROAD STEAMSHIP LINE, PANAMA RAILROAD, PACIFIC MAIL STEAMSHIP COMPANY, CONNECTING IN SAN FRANCISCO WITH THE OREGON RAILROAD AND NAVIGATION COMPANY AND PACIFIC COAST STEAMSHIP COMPANY.

Tariff of freight rates from New York to North Pacific coast points, viz, Portland, Astoria, Seattle, Tacoma, Port Townsend, Everett, Anacortes, New Whatcom (Bellingham Bay), Vancouver, and Victoria.

[Taking effect July 1, 1904. Subject to change without notice.]

[Class rates. Subject to the western classification. In cents per 100 pounds.]

1.	2.	3.	4.	5.	A.	B.	C.	D.	E.
180	150	130	115	105	105	85	80	80	70

Commodity rates from New York will be those of transcontinental westbound tariffs in effect at time of shipment less the following discounts:

Carloads, 20 per cent; less carloads, 30 per cent; observing minimum of 60 cents per 100 pounds.

Minimum charge for any single shipment will be \$4.

Charges from interior points plus transfer in New York will be absorbed out of the through rates when not in excess of 20 cents per 100 pounds, but in no case can maximum absorption leave less than 60 cents per 100 pounds from New York to Pacific coast terminals mentioned. All shipments from points outside of New York City must be consigned to the care of Panama Railroad Steamship Line, 24 State street, New York.

In addition to the regular transportation charges provided above, shipments are subject to toll levied in San Francisco by the State of California.

NEW YORK, July 1, 1904.

EXHIBIT O 8.

TARIFF No. 2—C. T.

Supersedes conflicting rates of earlier date.

PANAMA ROUTE—PANAMA RAILROAD STEAMSHIP LINE, PANAMA RAILROAD, AND CONNECTING STEAMER LINES.

Tariff of freight rates from New York and common points to California terminals, viz., Sacramento and Stockton.

(Taking effect January 18, 1904. Subject to change without notice.)

Class rates. Subject to the western classification. In cents per 100 pounds.

L.	2	3	4	5	A	B	C	D	E.
180	150	130	115	105	95	85	80	80	70

Commodity rates from New York will be those of "Sunset" tariff, No. C 22, Effective January 18, 1904, and supplements thereto, less the following discounts:

Carloads, 20 per cent; less carloads, 30 per cent, observing minimum of 50 cents per 100 pounds.

Minimum charge for any single shipment will be \$3.50.

When through rates are 70 cents per 100 pounds or over, via the Panama route, they will apply from Boston, Philadelphia, Baltimore, and common points, provided the local freight charges to New York plus transfer do not exceed 20 cents per 100 pounds, and provided further that all shipments from points outside of New York City are consigned to the care of Panama Railroad Steamship Line, 24 State street, New York.

In addition to the regular transportation charges provided above, shipments are subject to toll levied in San Francisco by the State of California.

NEW YORK, December 22, 1903.

EXHIBIT O 9.

TARIFF No. 4—S. C.

(Supersedes conflicting rates of earlier date.)

PANAMA ROUTE—PANAMA RAILROAD STEAMSHIP LINE, PANAMA RAILROAD, AND CONNECTING STEAMER LINES.

Tariff of freight rates from New York and common points to southern California points, viz, Los Angeles, San Diego, and Santa Barbara.

(Taking effect July 1, 1904. Subject to change without notice.)

[Class rates. Subject to the western classification. In cents per 100 pounds.]

1.	2.	3.	4.	5.	A.	B.	C.	D.	E.
180	150	130	115	105	105	85	80	80	70

Commodity rates from New York will be those of Transcontinental West Bound Tariffs in effect at time of shipments less the following discounts:

Carloads, 20 per cent; less carloads, 30 per cent, observing minimum of 60 cents per 100 pounds.

Minimum charge for any single shipment will be \$3.50.

Charges from interior points plus transfer in New York will be absorbed out of the through rates when not in excess of 20 cents per 100 pounds, but in no case can maximum absorption leave less than 60 cents per 100 pounds from New York to Pacific coast terminals mentioned. All shipments from points outside of New York City must be consigned to the care of Panama Railroad Steamship Line, 24 State street, New York.

In addition to the regular transportation charges provided above, shipments are subject to toll levied in San Francisco by the State of California.

NEW YORK, July 1, 1904.

EXHIBIT O 10.

FREIGHT TARIFF No. 60.

(This tariff supersedes all previous issues. Subject to change without notice.)

PACIFIC MAIL STEAMSHIP COMPANY—PANAMA ROUTE.

Rates of freight under through bills of lading from San Francisco to New York via Panama in connection with Panama Railroad Company and Panama Railroad Steamship Line.

[Class rates. Subject to the Western classification. In cents per 100 pounds in United States gold coin or its equivalent.]

1.	2.	3.	4.	5.	A.	B.	C.	D.	E.
180	150	130	115	105	105	85	80	80	70

Commodity rates to New York will be those of Transcontinental Freight Bureau East Bound Tariff No. 3 D, effective July 1, 1902, and supplements thereto or subsequent issues thereof, less the following discounts:

Carloads, 20 per cent; less carloads, 30 per cent, observing minimum of 40 cents per 100 pounds.

Special
Asphalt
Beans
Beeswax
Bone bl
Canned
Fish, in
Fruit, d
Glue
Grains
Grease
Herbs, i
Hides, c
Honey
Hops, in
Junk, in
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Seeds: A
Shells, s
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Special exceptions as follows, in cents per 100 pounds:

Asphalt (Standard "D")	40
Beans	55
Beeswax	75
Bone black	40
Canned goods	55
Fish, in barrels	50
Fruit, dried, in cases, strapped	55
Glue	50
Grains: Barley, rice, wheat	40
Grease	50
Herbs, including cascara, damiana, sumac, and grape root	75
Hides, dry (in bales)	70
Honey, strained, in tin, in cases, strapped	55
Hops, in compressed bales	90
Junk, including bones (bleached); cattle hair, compressed in bales; horns, old rope, rubber, waste in compressed bales, scrap leather, old metal	50
Leather (bellies, collar, heads, latigo, etc.)	60
Leather (buff, finished calf, chamois, etc.)	85
Liquors:	
Wine, in barrels	55
Wine, in puncheons	65
Brandy, in wood	60
Wine and brandy, in cases, strapped	75
Lumber, logs, and shingles:	
Cedar logs	50
Lumber and shingles	50
Toa and other hard woods	50
Metals: Antimony, copper matte, relative to value of \$100 per ton, copper cement, lead, zinc dross, etc.	40
Oil, in tin (boxed) or in wood	50
Ore: Chrome, manganese, or antimony	45
Peas	55
Quicksilver	50
Rags	55
Seeds: Alfalfa and mustard, double sacked	40
Shells, sea, in sacks	60
Tallow	50
Wool, in grease, compressed in bales	65

Through rates to points beyond New York quoted on application.

When "class" and "commodity" rates conflict, the lowest will govern.

Minimum bill of lading to New York, \$3.

SAN FRANCISCO, December 15, 1902

EXHIBIT C 11.

FREIGHT TARIFF No. 40.

[This tariff supersedes all previous issues. Subject to change without notice.]

PACIFIC MAIL STEAMSHIP COMPANY—PANAMA LINE.

Rates of freight under through bills of lading from San Francisco to Europe via Panama, in connection with Panama Railroad Company and Atlantic steamship lines from Colon to Barcelona, Pauillac (for Bordeaux), Cadiz, Bremen, Genoa, Hamburg, Harre, Liverpool, London, Marseille, Santander, Southampton, and St. Nazaire.

Rates of freight on general merchandise, not specified under caption of "Special rates," as given below, will be taken per ton of 2,240 pounds or 40 cubic feet, "carrier's option," subject to "Panama route," European classification, viz

	Class				
	D.	1.	2.	3.	4.
Shillings per ton	100	90	75	60	50

SPECIAL RATES.

The following special rates will apply on 10-ton lots or over, shipped under one bill of lading. Less quantities will take rates 20 per cent higher. The freight on a lot of less than 10 tons, however, shall not exceed that for 10-ton lots.

(Shillings per ton of 2,240 pounds.)

Apricot kernels	75
Asphalt, in barrels	75
Beans, in bags	60
Beeswax	60
Canned goods	50
Canned salmon	50
Fish, in barrels	60
Fruit, dried, in cases, strapped	70
Grains: Barley, wheat, rye, in bags	50
Herbs, including cascara, damiana, and sumac	75
Hides, dry, baled	80
Honey, strained, in tins, in cases, strapped (freight to be prepaid)	60
Hops, compressed	70
Horns	80
Household goods and personal effects per 40 cubic feet or 2,240 pounds, carrier's option (freight to be prepaid)	75
Liquors:	
Brandy and whisky, in wood	75
Brandy, whisky, and wine, in strapped cases	80
Wine, in barrels and kegs	80
Lumber (30-foot lengths and under) per 1,000 feet board measurement	60
Logs, cedar or tog, and other hard woods	60
Metals: Antimony, copper matte, copper cement, black copper, lead, zinc dross, etc	45
Ore, low grade, base tonnage	40
Pampas prunes, packed	160
Peas, in bags	60
Seeds, mustard and alfalfa, in double bags	60
Shells, sea	70
Tallow or grease	60

Rates on other commodities or to other ports furnished on application. Minimum charge for bill of lading, 20 shillings.

Shipments will be accepted to Amsterdam, Antwerp, and Rotterdam at rates 10 shillings per ton higher than those above given.

SAN FRANCISCO, December 15, 1902.

EXHIBIT O 12.

FREIGHT TARIFF No. 30.

(This tariff supersedes all previous issues.)

PACIFIC MAIL STEAMSHIP COMPANY--PANAMA LINE

Rates of freight under through bills of lading from Mexican and Central American ports to Europe, via Panama, in connection with Panama Railroad Company and Atlantic steamship lines, in United States gold coin or its equivalent.

Articles	Measurement	From Central American ports.	Per cent ad valorem.	From Mexican ports.	Per cent ad valorem.
Balsam	Per 100 pounds	\$1.00		\$1.00	
Bark	Per 100 pounds	.05		.05	
Cedar	Per 100 pounds	.05		.05	
Cigars	Per 100 pounds	.80		.80	
Cochineal	Per 100 pounds			.60	
Coffee, clean	Per 100 pounds			.60	
Coffee, shell	Per 100 pounds			.60	
Coffee, from Central American ports	Per 100 pounds			.60	
Coffee, from Mexican ports	Per 100 pounds			.60	
Cotton, in bales	Per 100 pounds			.60	
Extract of vanilla	Per 100 pounds			.60	
Gum arabic	Per 100 pounds			.60	
Indigo	Per 100 pounds			.60	
Lead	Per 100 pounds			.60	
Merchandise	Per 100 pounds			.60	
Pepper	Per 100 pounds			.60	
Perishable goods	Per 100 pounds			.60	
Shells	Per 100 pounds			.60	
Sisal	Per 100 pounds			.60	
Skins, deer and goat	Per 100 pounds			.60	
Silver, scrap	Per 100 pounds			.60	
Specie and bullion	Per 100 pounds			.60	
Sugar	Per 100 pounds			.60	
Tobacco, in sections	Per 100 pounds			.60	
Vanilla	Per 100 pounds			.60	
Wool	Per 100 pounds			.60	
Yucca	Per 100 pounds			.60	
Zinc	Per 100 pounds			.60	

Minimum bill of lading, \$9.00. Minimum freight, \$1.00.
 Values of all cargo on which no freight is charged, in United States gold coin.
 Freight on perishable goods to be prepaid.
 Where goods are consigned to the carrier, the carrier must be given in all cases.
 No explosives or combustible cargo will be transported by this line.

SAN FRANCISCO, November 1, 1902.

SUPPLEMENT No. 2, TO FREIGHT TARIFF No. 30

PACIFIC MAIL STEAMSHIP COMPANY—PANAMA LINE

Rates of freight under through bills of lading from Mexican and Central American ports to Europe, via Panama, in connection with Panama Railroad Company and Atlantic steamship lines, in United States gold coin or its equivalent

The following amendments and additions are effective upon receipt of this supplement at port of shipment:

Articles	How taken	From Cen- tral Amer- ican ports	Percent	From Mexican ports	Percent
Silver precipitates					
Value not over \$8,000 per ton	Per 100 pounds, and ad valorem	80.0	1	40.0	1
Value over \$8,000 and not ex- ceeding \$12,000 per ton	Ad valorem				
Value over \$12,000 per ton	Ad				

SAN FRANCISCO, April 22, 1966.

EXHIBIT C-13.

Version Type No. 22

PACIFIC MAIL STEAMSHIP COMPANY - PANAMA

Rates of freight under through bills of lading from Mexican and Central American ports to New York, via Panama. In connection with Panama Railroad Company's Panama Railroad Steamship Line. Payable in United States Dollars. Freight to be prepaid, unless otherwise noted in tariff, in English.

* Changes since tariff published

Shipments of India rubber to be on separate bills of lading, and amounts to less than the minimum charge for bill of lading the a- be charged, provided the shipper has other goods from the same po- same consignee, sufficient in all to exceed the minimum charge.

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Journal of Management Education

EXHIBIT O 14.

FREIGHT TARIF No. 53.

[Effective August 15, 1903. This tariff supersedes all previous tariffs and supplements, and is subject to change without notice.]

PACIFIC MAIL STEAMSHIP COMPANY—PANAMA LINE.

Rates of freight from Panama and Central American and Mexican ports to San Francisco.

[Payable in United States gold coin. Pounds, when mentioned in tariff, are English]

Articles	Panama and Central American ports	Per cent	Mexican ports				Mazatlan	Per cent
			Ports south of Acapulco.	Per cent	Acapulco, Manzanillo, San Blas	Per cent		
Bears, dried, in sacks, per 100 pounds	\$0.50		\$0.50		\$0.37		\$0.25	
Cigars, per cubic foot	25		25		25		25	
Cocoa, per 100 pounds	40		40		40		40	
Coffee, per 100 pounds	40		40		40		40	
Fish, dried, in sacks, per 100 pounds	30		30		30		30	
Fruits and vegetables, green, per cubic foot	30		30		30		30	
Hides and pelts, green, per 100 pounds	30		30		30		30	
Hides and pelts, dry, loose, per 100 pounds	30		30		30		30	
Hides and pelts, dry, bundles, per 100 pounds	75		75		75		75	
India rubber, per 100 pounds	1.00		1.00		1.00		1.00	
Indigo, per 100 pounds	1.00		1.00		1.00		1.00	
Jewelry and silver plate and valuors	1.00		1.00		1.00		1.00	
Leather (sole, in bundles), per 100 pounds		1		1		1		1
Merchandise, not otherwise specified, per 10 cubic feet, or 2,000 pounds, staples option	10.00		10.00		10.00		10.00	
Oil cake, per 100 pounds								
Ores, concentrates and precipitates, as declared on bill of lading								
Value not exceeding \$100 per 2,000 pounds, per 100 pounds	32		32		32		32	
Value over \$100 and not exceeding \$200 per 2,000 pounds, per 100 pounds	37		37		37		37	
Value over \$200 and not exceeding \$500 per 2,000 pounds, per 100 pounds	40		40		40		40	
Value over \$500 and not exceeding \$1,000 per 2,000 pounds, per 100 pounds	75		75		75		75	
Value over \$1,000 and not exceeding \$2,000 per 2,000 pounds, per 100 pounds and ad valorem	75		75		75		75	
Value over \$2,000 per 2,000 pounds, per 100 pounds and ad valorem	75		75		75		75	
Peas, dried, in sacks, per 100 pounds	30		30		30		30	
Salt, in bags, per 100 pounds	25		25		25		25	
Shells, pearl and others, per 100 pounds	50		50		50		50	
Shrimps, dried, in sacks, per 100 pounds	30		30		30		30	
Skins, alligator and bear, per 100 pounds	1.00		1.00		1.00		1.00	
Skins, deer and goat, dry, in bundles, per 100 pounds	1.00		1.00		1.00		1.00	
Specie and bullion, gold value to be declared on bill of lading								
Value under \$1,000 ad valorem		1		1		1		1
Value \$1,000 and under \$10,000, ad valorem				1				1

^aTo be declared on treasure bills of lading as ores, concentrates, or precipitates, and when possible to be stowed in the treasure tanks.

Rates of freight from Panama and Central American and Mexican ports to San Francisco—
Continued.

Articles.	Panama and Central Ameri- can ports.	Per cent.	Ports south of Aca- puleo.	Per cent.	Mexican ports			
					Aca- puleo.	Manzanillo.	Mazatlan.	Per cent.
Specie and bullion, etc.—Continued.								
Value \$10,000 and under \$10,000								
ad valorem								
Value \$10,000 or over, ad valorem								
Sugar, raw, in bags, per 100 pounds	80	25	80				80	25
Tobacco, in bales, per 100 pounds	1 00		1 00					
Tobacco, in cases, per cubic foot								
Wood, in logs:								
Cedar, per cubic foot								
Logum vitae, per 100 pounds								
Other woods, per 100 pounds								

No bill of lading from ports south of Acapulco signifies a gross charge of \$2.50; from Acapulco and ports north thereof, \$2.

Freight on perishable goods to be prepaid.

Values of all cargo on which ad valorem charge is made must be declared in United States gold coin.

Where goods are consigned to "order," the name of consignee as notified must be given in all cases.

No explosives or combustible cargo, such as crude petroleum, kerosene, etc., will be transported by this line.

Package rates from Panama and Central American and Mexican ports to San Francisco.

Articles.	Per cent.
Package of 10 pounds	85
Package over 10 pounds to 50 pounds	90
Package over 50 pounds to 100 pounds	95
Package over 100 pounds to 500 pounds	1 00
Package over 500 pounds to 1,000 pounds	1 05
Package exceeding 1,000 pounds, per 1,000 pounds	1 10

Ad valorem freight rates.

Value of cargo.	Per cent.
From \$50 to \$100	85
From \$100 to \$500	90
From \$500 to \$1,000	95
From \$1,000 to \$5,000	1 00
From \$5,000 to \$10,000	1 05
From \$10,000 to \$50,000	1 10
From \$50,000 to \$100,000	1 15
From \$100,000 to \$500,000	1 20
From \$500,000 to \$1,000,000	1 25
Over \$1,000,000, per \$1,000,000	1 30

SAN FRANCISCO, *July 1, 1900.*

EXHIBIT O 15.

THE PACIFIC STEAM NAVIGATION COMPANY, COMPAÑIA SUD-AMERICANA DE VAPORES,
SOUTH AMERICAN STEAMSHIP COMPANY, AND PANAMA RAILROAD STEAMSHIP LINE.

New freight-rate schedule to New York via Panama.

Will go into effect on September 15, 1902, from all ports between Guayaquil and Valparaiso, both inclusive. For ports between Panama and Guayaquil, see special rate.

[Rates in American gold.]

Articles	How freight should be calculated.	Fast freight, from ports between Guayaquil and Valparaiso, both inclusive.	Changes since tariff published.
Sulphur	Ton by weight.	\$12.00	
Cotton (pressed bales)	do.	25.00	70s
Indigo	do.	50.00	
Anise	do.	30.00	
Sugar	do.	12.50	30s
Cascarilla	do.	30.00	
Coffee and cacao	do.	15.00	\$17.00
Cochineal	do.	30.00	
Coca leaves	do.	10.00	\$30.00
Condurango	do.	25.00	
Dry salted hides	do.	30.00	
Dry salted hides (in bales)	do.	35.00	
Fresh salted hides (received only between the months of November and April)	do.	25.00	
Rubber, in bulk	do.	25.00	
Mother-of-pearl shell	do.	1.00	
Commissions and samples	Cubic feet	1.00	
Graft	Ton by weight	25.00	
Wool of alpaca (in pressed bales)	do.	25.00	70s
Wool of vicuña (in pressed bales)	do.	40.00	
Wool of sheep (in pressed bales)	do.	25.00	
Copper and tin ore and barilla	do.	15.00	
Silver ore	do.	15.00	
Matico	do.	15.00	
General merchandise (not mentioned in this schedule)	by weight or measure, at option of company	30.00	
Orchilla	Ton by weight	15.00	
Chinchilla skins	By value	1.00	
Goatskins (in bales)	Ton by weight	25.00	
Calfskins (in bales)	do.	12.00	
Lead, in pigs	do.	30.00	
Peruvian bark	do.	30.00	
Rubbery	do.	30.00	
Panama hats	Measured ton	1.00	
Vegetable ivory	Ton by weight	1.00	
Tobacco (in bales)	do.	1.00	
Specie	By value	1.00	
Lard	Ton by weight	1.00	
Zarzapilla and pichil	do.	1.00	
Minimum freight bill (prepaid)	do.	1.00	

Freight is calculated on the gross weight or measure.
A measured ton equals 40 cubic feet English.
A ton by weight equals 2,240 pounds avoirdupois.
A charge of \$1.25 American gold per ton is charged for all ports not on the direct line to pay the expenses of transshipment.

HORACE LYON,

Manager of La Campaña Sud-Americana de Vapores.

GEORGE SHARPE,

Manager of the Pacific Steam Navigation Company.

VALPARAISO, September 11, 1902.

EXHIBIT O 16.

THE PACIFIC STEAM NAVIGATION COMPANY AND COMPAÑIA SUD-AMERICANA DE VAPORES.

Tariff of freights under through bills of lading via Panama from Chilean, Peruvian, Ecuadorian and Colombian ports to Europe (Liverpool, London, Harre, Hamburg, and Bremen).

In connection with the Royal Mail Steam Packet Company, Hamburg-American Line, Compagnie Générale Transatlantique, Frederick Leyland & Co. (1900), Harrison Line, La Veloce Navigazione Italiana a Vapore, Compañía Trasatlántica de Barcelona and "Cosulich" Austro-American Line.

Tariff of freights under through bills of lading via Panama from Chilean, etc., ports, etc. — Continued.

Articles.	How freight should be calculated.	From Ecuadorian ports.	Per cent.	From Colombian ports.	Per cent.
Bark.	Per ton weight (see below).	£ 0 0		£ 0 0	
Copper, in bars and ingots.	do.	6 0 0	5	6 0 0	5
Cocoa and coffee for London.	do.	4 0 0	5	4 0 0	5
Liverpool, Havre, Hamburg, and Bremen.					
General merchandise.	do.	10 0 0		6 0 0	
Hides, dry.	do.	5 0 0	5	5 0 0	5
Horsehair.	do.	6 0 0	5	6 0 0	5
Horns, bones, etc.	do.	6 0 0	5	6 0 0	5
Hats.	Per ton of 10 cubic feet.	12 0 0	5	12 0 0	5
Ivory nuts.	Per ton weight (see below).	2 0 0		2 0 0	
India rubber.	do.	5 0 0	5	5 0 0	5
Minimum bill of lading.		2 2 0		2 2 0	
Ore-hilla.	Per ton weight (see below).	4 0 0		4 0 0	
Plants.	Per ton of 10 cubic feet.	12 10 0	5	12 10 0	5
Sheep and goat skins.	Per ton weight (see below).	6 0 0	5	6 0 0	5
Specie.	Value.		12		12
Sulphides of silver.	do.		14		14
Tobacco.	Per ton weight (see below).	4 0 0	5	4 0 0	5
Wax.	do.	5 0 0	5	5 0 0	5

NOTE. — The ton weight is calculated at 2,240 pounds for United Kingdom ports, and 1,000 kilos for continental ports.

Wharfage at Colon to be paid by consignees at the rate of 6d. per ton on shipments for British and German ports, and at the rate of 1 franc per ton for French and all Mediterranean ports.

For cargo shipped at intermediate ports with transshipment at Callao or Valparaiso, 5s. per ton extra on the above rates, to cover the expenses incurred.

Cargo for Paris, £1 per ton extra on rates as per this tariff.

Cargo for Antwerp, Rotterdam, and Amsterdam, 10s. per ton additional to be charged on cargo for these indirect ports.

Freight on plants and other perishable cargo to be prepaid.

THE PACIFIC STEAM NAVIGATION COMPANY.
LA COMPAÑIA SUD-AMERICANA DE VAPORES.

VALPARAISO, March 1, 1904.

EXHIBIT O 17.

[Frederick Leyland & Company (1900) (Limited).]

Rates of freight from Liverpool to south Pacific ports via Colon-Panama.

These rates apply only to packages and pieces not exceeding 2 tons weight, and are payable in exchange for bills of lading.

Through bills of lading issued and through rates of freight quoted from most towns in the United Kingdom and European ports.

The through rates of freight, etc., and classification of goods are subject to revision without notice. Cargo taken by special agreement only.

Bills of lading, showing the conditions on which goods are carried by the Leyland Line and its connections, can be obtained only from the printers (James Mawdsley & Son), 32 Castle street, Liverpool, or from the agents of the line.

Three plain copies bill of lading required for all Pacific ports except Ecuador, for which four are necessary.

All goods (except Class D and those paying freight ad valorem) of £200 and upward in value per freight ton will be charged as valuable.

Heavy Lading rates in

2 to 3.....
3 to 4.....
4 to 5.....
5 to 6.....
6 to 7.....
7 to 8.....
8 to 9.....
9 to 10.....

Dangerous
other goods
containing
Class D mu
Goods cl

Heavy Lifts.—Pieces and packages weighing over 2 tons will be charged the following rates in addition:

Tons	Measure- ment goods.	Weight goods.
2 to 3.....	10	15
3 to 4.....	15	25
4 to 5.....	20	30
5 to 6.....	25	45
6 to 7.....	30	50
7 to 8.....	35	65
8 to 9.....	40	70
9 to 10.....	45	75

Dangerous goods in packages not exceeding 10 kilos weight when shipped with other goods may be accepted at one-half the minimum charge, but no bill of lading containing dangerous goods will be signed for less than 639. Packages of goods in Class D must not exceed 112 pounds each.

Goods classed D. D. pay 200s. per ton to all ports.

Major ports.	Classes of merchandise, per freight ton of 40 cubic feet, or 2,240 pounds gross weight or percentage ad valorem (steamer's option).				Minimums.			Additional charges.		
					Class D.					
	D.	Valorem	1.	2.	on bill of lading with other goods.	on bill of lading without other goods.	classes other than D.	Municipal tax per freight ton.	Consular tax per freight ton.	Colon wharfage per freight ton.
Buenaventura.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Tumaco.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Emeraldus.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Bahia.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Manila.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Puerto Bolívar.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Guayaquil.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Payta.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Ken.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Pasasmayo.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Salaverry.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Callao.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Pisco.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Mollendo.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Illo.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Arica.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Pisagua.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Iquique.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Tocopilla.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Antofagasta.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Taltal.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Caldera.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Coquimbó.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6
Valparaíso.....	100	150 or 2.	75 0	60 0	31 6	31 6	31 6	5 0	5 0	6

a CLASS SPECIAL.—The goods under this class are as follows: Bricks, cement, coal, coke, iron and steel bars, hoops, plates, sheets (including galvanized) pig rails, fish plates, axles and wheels, lead in pigs, salt in bags, soda ash, canvas, hypso, plate, and stucco.

b Class 4.

c Per cent ad valorem minimum

Puerto mares.—Goods may also be accepted on through bills of lading to the minor ports at rates of freight to be charged to the nearest major port and subject to the following clause: "Goods to be cleared at ——— by Messrs. ——— and local freight and expenses to destination to be paid at this port."

LIVERPOOL, November 1, 1904.

(Tariffs of other English lines to Colon practically the same.)

FREDERICK LEYLAND & CO. (LIMITED),
25, James Street, Liverpool.

Hamburg
Panama, Colon
Ship Company
American
Freight

Every
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Every p
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designed.
"C. O."
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Freight
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Over 3 to 4
Over 4 to 5
Over 5 to 6
Over 6 to 7
Over 7 to 8
Over 8 to 9
Over 9 to 10

For pac

EXHIBIT O 18.

[Translation.]

[Issue No. 20. January, 1906. Herewith all former issues are annulled.]

Hamburg-America Line, the West Indies-Mexico-Panama route, via Colon and Panama, in connection with the Panama Railroad Company, the Pacific Mail Steamship Company, the Pacific Steam Navigation Company, La Compania Sud-Americana de Vapores, and other lines.

Freight rates for goods shipped from Hamburg, Bremen, and Antwerp to South American ports.

Every freightage is to be paid on delivery of the invoices, without any reimbursement, not even if the ship or the goods should be lost.

Every parcel must be packed safely, and is to be furnished with a clearly visible mark, as well as with a number and the full name of the port for which it is designed.

"C. O. D." (cash on delivery) is not allowed.

For invoices, the formula issued by our company is to be used only.

Combustibles, explosive goods, and other goods dangerous to the ship or its cargo, as well as rails, weapon or war material, and packs of more than 2,000 kilos require a special agreement.

Freight rates for shipment from Grimsby and Havre, according to special tariffs of the agents of those places.

An extra rate of 7s. 6d. per 40 cubic feet, respectively, 1,000 kilos is to be paid for through invoices for Amsterdam and Rotterdam, additional to the Hamburg rates.

Freight rates for packs of more than 2,000 kilos.

1. To Panama and ports north of it:
 More than 2,000, to 4,000 kilos, one and a half times the usual rate.
 More than 4,000, to 6,000 kilos, twice the usual rate.
 More than 6,000, to 8,000 kilos, twice and a half the usual rate.
 More than 8,000, to 10,000 kilos, thrice the usual rate.
2. To the South Pacific. The following rates are to be paid beyond the usual ones.

Weight.	If by measure, per ton.	If by weight, per ton.
Over 2 to 3 tons	10	15
Over 3 to 4 tons	15	25
Over 4 to 5 tons	20	30
Over 5 to 6 tons	25	40
Over 6 to 7 tons	30	50
Over 7 to 8 tons	35	65
Over 8 to 9 tons	40	70
Over 9 to 10 tons	45	75

For packs of more than 10 tons a special agreement is required.

Freight rates from Hamburg, Bremen, and Antwerp, via Colon and Panama.

For 1,000 Kilos, 40 cubic feet (English), or according to the value, at the ship's option. All goods of 200s. value and more; pay first-class to Panama and the ports north of it, and Class V to the South Pacific, except extra goods and goods when pay according to their value.

To—	Class.						Pre- cious metal, coin, and jewels.	Minimum rates, dangerous goods. Maximum, 50 kilos a pack, if for- warded on one invoice, together with other goods, per kilo.			Wharf, national or municipal, duties, etc.	
	V.							Col- on goods.	Under 10 kilos.	Sep- arate rate.		Pri- mage.
	1.	2.	3.	4.	D.	DD.						
Panama (extra rates below) a.	s.	s. d.	s. d.	s. d.	s. d.	s.	s.	P. d.	s. d.	s. d.	s.	P. d.
		120 or 2%	100 0	90 0	80 0	60 0	200	44	21 0	10 6	42	.....
Buenaventura	150 or 2½%	75 0	60 0	55 0	52 6	100	200	.....	31 6	15 9	63	.....
Emeraldas.	150 or 2½%	75 0	60 0	55 0	52 6	100	200	.....	31 6	15 9	63	.....
Bahia (Canaques).	150 or 2½%	75 0	60 0	55 0	52 6	100	200	.....	31 6	15 9	63	.....
Mantua	150 or 2½%	75 0	60 0	55 0	52 6	100	200	.....	31 6	15 9	63	.....
Puerto Bolivar	100 or 2½%	60 0	45 0	40 0	32 6	100	200	.....	31 6	15 9	63	.....
Guayaquil	100 or 2½%	60 0	45 0	40 0	32 6	100	200	.....	31 6	15 9	63	.....
Paita, Eten.	100 or 2½%	60 0	52 6	45 0	32 6	100	200	.....	31 6	15 9	63	.....
Pacasmayo	100 or 2½%	60 0	52 6	45 0	32 6	100	200	.....	31 6	15 9	63	.....
Salaverry	100 or 2½%	60 0	52 6	45 0	32 6	100	200	.....	31 6	15 9	63	.....
Callao, Pisco	100 or 2½%	60 0	52 6	45 0	32 6	100	200	.....	31 6	15 9	63	.....
Mollendo.	100 or 2½%	57 6	50 0	37 6	30 0	100	200	.....	31 6	15 9	63	.....
Ilo, Arica.	100 or 2½%	57 6	50 0	37 6	30 0	100	200	.....	31 6	15 9	63	.....

Pisagua
Iquique
Tocopilla
Antofagasta
Valparaiso

Plaza	100	50	0	42	6	35	0	30	0	100	200	31	6	31	6	15	9	63	10	6d. per freight ton Colon wharf duty; minimum, 6d. per invoice.
Iquique.....	100	50	0	42	6	35	0	30	0	100	200	31	6	31	6	15	9	63	10	
Tacapilla.....	or 2½																			
Antofagasta.....																				
Taltal.....																				
Caldera.....																				
Coquimbo.....																				
Valparaiso.....																				

^a Extra rates for Panama, additional to taxes named above:

Beans, onions, peas, potatoes, soap, 41s. 8d. weight ton.
Beer, in cases and barrels, candles, sugar refined, 41s. 8d. measured ton.
Flour, rice, less than 10-ton lots, 41s. 8d. weight ton.
Fl ar, 10-ton lots and upwards, 32s. 8d. weight ton.
Rice, 10-ton lots and upwards, 35s. weight ton.
Boots, shoes, lampblack, 88s. 4d. measured ton.
Bricks (common building), 35s. weight ton.
Cement, pitch, resin, tar, 25s. weight ton.
Fish, dried and salt, hams, 50s. measured ton.
Petroleum, refined, 68s. 8d. measured ton.

^b Gunpowder, in approved packs, 3d. per pound, net.

^c Contrary to the general classification, the following goods belong to Class 4:

Buenaventura, Tumaco, Esmeraldas, Bahía and Maniz; Bricks, cement, coal, coke, salt (in bags), soda (asn. caustic, hyposulphate and silicate), wheels without axles, earthenware, glass (bottle), glass bottles, lamp glasses, paper (common and packing), sacks (old and new), salt, shovels, straw envelopes, sugar (in bags or barrels), threshers, wire (barbed and black varnished), safety matches.

Parcels: The entire west shore, 7s. 6d. for every cubic foot or part of it.

Alterations without publication reserved.

On 2 per cent.

c 10-ton lots, 55s.

^d Colombia, Ecuador, and Peru 1½ per cent; Chile, 1 per cent.

EXHIBIT O 19.

[Translation.]

Freight rates, corrected for Panama-San Francisco. French General Transatlantic Packet Steamship Company. April 1, 1905.

Freight rates for the Pacific ports.

Sailing from Havre, St. Nazaire, Bordeaux, Marseille, and Santander, in connection with the Panama Railroad Company, Colon-Panama; the Pacific Mail Steamship Company, Panama-San Francisco; Compañía Sud-Americana de Vapores and Pacific Steam Navigation Company, Panama-Valparaiso.

[To be paid by francs per ton of 40 cubic feet, per 1,000 kilos, or at valorem, at the option of the company; pieces exceeding 1,000 kilos or of great volume, the rate to be agreed upon prior to shipment.]

Dates of sailing: From St. Nazaire, 9th; Havre, 22d; Bordeaux, 26th; Marseille, 8th, to—	Class 1.		Class 2.		Class 3.		Class 4.		Class 4, per 10 tons and for every invoice.		Coin.		Precious stones and jewelry.		Min. for invoices.		Insurance. Minimum, 1 franc.	
	Fr.	P. ct.	Fr.	P. ct.	Fr.	P. ct.	Fr.	P. ct.	Fr.	P. ct.	Fr.	P. ct.	Fr.	P. ct.	Fr.	P. ct.	Fr.	P. ct.
Panama (3) ^a	155	or 2	130		120		80		75		14		14		37.50			
South Pacific (4):																		
Buenaventura, Tumaco (Col.), Esmeraldas (8), Bahia (8), Manta (8), (Ecuador) ^b	190	or 24	95		75		70		67.50		14		24		53		1	
Puerto Bolivar, Guayaquil, (Ecuador) ^c	190	or 24	75		60		50		45		14		24		53		1	
Payta, Eten (Peru), Pacasmayo, Salaverry.....	130	or 24	75		70		60		45		14		24		53		1	
Callao (9), Pisco, Mollendo, Ilo, Arica ^c	130	or 24	75		60		50		40		14		24		53		1	
Pisagua, Iquique, Tocopilla (Ch.), Antofagasta (10), Taltal (Ch.), Caldera, Carrizal, Bajo (Ch.), Coquimbo, Valparaiso (Ch.) ^c	130	or 24	65		55		45		40		14		24		53		1	

^a Without any primage.

^b Precious stones and jewelry: rates of merchandise, less 20 per cent.

^c With 10 per cent primage.

^d Class V.

Samples and small parcels not exceeding 100 francs of value, 12.50 francs per cubic foot.

NOTES.—(3) *Panama*.—Wharf taxes and duties, 7 francs per ton; minimum, 7 francs. Stamp duty, 5 francs per series of invoices.

(4) *Every port except Panama*.—Colon, wharf duty, 1 franc per ton; minimum, 1 franc.

(8) *Esmeraldas, Bahia, Manta*.—Municipal taxes, 4 francs per ton.

(9) Opium may be imported into Peru by the port of Callao only. The same is the fact with war material—ammunitions of all kinds and military equipment requiring an authorization from the Peruvian Government.

(10) *Antofagasta*.—To be indicated on the invoices if the goods are for the Chilean territory or in transit for Bolivia.

Consular manifests.—The cost of the visé of the consular manifest will be at the sender's expense, independently of that of the consular invoices for all the ports submitted to the consular formalities, whether at the "pro rata" of the charges, whether by the application of taxes fixed by series of invoices or for bills of lading, at the option of the company, and in this case as follows: Panama, 12.50 francs; Colombia, 9 francs; Ecuador, 20 per cent of the bills visé cost; Peru, 2 francs; Chile (visé of the invoice), 5 francs.

EXHIBIT O 20.

[Translation.]

Mercantile Circular No. 29. (This circular annuls all previous ones.)
 "La Veloce"—Italian Steamship Company, Central America Line.

Freight rates for the Pacific ports.

In connection with the Panama Railroad Company, Colon-Panama; the Pacific Mail Steamship Company, Panama-San Francisco; the Compagnia Sud-Americana de Vapores and the Pacific Steam Navigation Company, Panama-Valparaiso.

[Freightage to be paid in gold francs per ton of 40 cubic feet, or per 1,000 kilos, at the company's option. All goods of 1,000 francs or more value per liable ton pay Class 1, except special goods and goods payable ad valorem.]

Destination.	Class 1.	Class 2.	Class 3.	Class 4.	Class 4, a	Coin.	Precious stones and jewelry.	Minimum for every invoice.
	Fr. P. ct.	Fr.	Fr.	Fr.	Fr.	P. ct.	P. ct.	Fr.
Panama (1), (Col.).....	155, or 2	130	120	80	75	1½	1½	37.50
South Pacific:								
Buenaventura (2), Tuma o								
(2), (Col.); Esmeraldas (7),								
Bahia (7), Manta (7), (Ec-								
uador).....	200, or 2½	105	85	80	67½			
Puerto Bolivar (2), Guaya-								
quil (8), (Ecuador).....	200, or 2½	85	70	50	64½			
Paíta (9), Pimentel (9), (10),								
Eten (9), Pacasmayo (9),								
Salaverry (9), Peru.....	200, or 2½	85	70	65		1½	2½	.58
Callao (9), Pisco (9), Mollendo								
(9), Ilo (9), (Peru); Arica								
(Chile).....	135, or 2½	65	60	55				
Pisagua, Iquique, Tocopilla,								
Antofagasta, Taltal, Cal-								
dera, Carrizal, Bajo, Co-								
quimbo, Valparaiso (Chile).....	135, or 2½	60	55	55				

a By quantity and for every invoice at least 10 tons.

b Class 5. Quicksilver designed for any South Pacific port, 3 per cent ad valorem. For other ports special agreements required.

NOTES.—Extra taxes, for all ports, 1 franc for every ton, payable as a wharf duty at Colon; minimum, 1 franc.

1. Panama: Duty of manifest, 6.25 francs for every invoice; wharf, light-house and municipal duties, 7 francs per 40 cubic feet or 1,000 kilos; stamp duty, 5 francs for every series of bills of lading.

2. Buenaventura, Tumaco: Duty of manifest, 9 francs per series of invoices.

7. Esmeraldas, Bahia (Caraquez), Manta: Duty of manifest, 2 per cent of the goods' value; minimum, 2 francs; municipal duty, 4 francs for each ton.

8. Puerto Bolivar, Guayaquil: Duty of manifest, 2 per cent of the goods' value; minimum, 2 francs.

9. Paíta, Pimentel, Eten, Pacasmayo, Salaverry, Callao, Pisco, Mollendo, Ilo: Duty of manifest, 2 francs for the indorsement of each invoice.

10. Pimentel (via Eten): Cost of forwarding, 6.50 francs per 40 cubic feet or per 1,000 kilos of each shipment of less than 10 tons.

The cost of legalizing the invoices and the cost of the consular invoices belong to the sender's expense. Freight rates, as well as the classification of the goods, may be changed without previous publication.

To the freight rates above mentioned will be added an additional tax of 5 per cent.

EXHIBIT O 21.

South Pacific freight rates.

Panama Railroad Company and connecting carriers. March, 1905.

CONDITIONS.

All rates from the United States to be charged per cubic feet, or per 100 pounds, whichever yields more freight.

No package described as samples or patterns to be shipped on bill of lading.

In the event of different articles being shipped in the same package, the rate of freight for the highest-rated article to be charged upon the whole.

No bill of lading to be signed for less than \$5.

All pieces and packages exceeding 2 tons in weight to be charged extra freight in accordance with the scale for heavy lifts.

All delivery abroad to be ordinary and customary delivery of the port.

No contracts shall be made, and no quotations given, for shipments extending beyond three months succeeding the month in which the quotation is given.

All quotations given to be subject to revision until actual engagement, but seven days may be allowed for reply.

All freight payable on delivery of bill of lading to shippers.

Rates subject to alteration without notice.

Owners' risk: Oils and other liquids are taken only at owners' risk of leakage. Glassware, crockery, and all fragile property concealed in packages, only at owners' risk of breakage.

All perishable property only at owners' risk of frost, heat, and decay.

Dynamite, blue powder, or high explosives of any kind not carried.

Refined petroleum taken only when put up in tin cans, boxed and strapped, and marked as required by United States law.

Shippers must comply with all consular regulations for manifests, invoices, certification, etc.; and any fine imposed by authorities at port of destination, or damage resulting from failure in this respect, or for errors or omissions therein, shall be at the risk and expense of consignees of the goods, and shall be paid by them.

Rates per cubic foot or per 100 pounds, at option of carrier.

Ports.	Valuables.	DD.	D.	Class 1.	Class 2.	Class 3.	Class 4.
180 cents cubic foot:	\$1.20	cubic foot:	60 cents cubic foot:	45 cents cubic foot:	30 cents cubic foot:	20 cents cubic foot:	15 cents cubic foot:

Rates per cubic foot or per 100 pounds, at option of carrier.

Ports.	Valueables	DD.	D.	Class 1.	Class 2.	Class 3.	Class 4.
Buenaventura.....	80 cents cubic foot; \$1.60 100 pounds or 24 per cent.	\$1.20 cubic foot; \$2.40 100 pounds.	60 cents cubic foot; \$1.20 100 pounds.	45 cents cubic foot; 90 cents 100 pounds.	36 cents cubic foot; 72 cents 100 pounds.	33 cents cubic foot; 66 cents 100 pounds.	32 cents cubic foot; 64 cents 100 pounds.
Tumaco.....							
Emeraldas.....							
Bahia.....	80 cents cubic foot; \$1.60 100 pounds or 24 per cent.	\$1.20 cubic foot; \$2.40 100 pounds.	60 cents cubic foot; \$1.20 100 pounds.	45 cents cubic foot; 90 cents 100 pounds.	36 cents cubic foot; 72 cents 100 pounds.	33 cents cubic foot; 66 cents 100 pounds.	32 cents cubic foot; 64 cents 100 pounds.
Mania.....							
Cayo.....							
Ballenita.....							
Puerto Bolivar.....	80 cents cubic foot; \$1.60 100 pounds or 24 per cent.	\$1.20 cubic foot; \$2.40 100 pounds.	60 cents cubic foot; \$1.20 100 pounds.	36 cents cubic foot; 72 cents 100 pounds.	27 cents cubic foot; 54 cents 100 pounds.	24 cents cubic foot; 48 cents 100 pounds.	20 cents cubic foot; 40 cents 100 pounds.
Guayaquil.....							
Tumbes.....							
Payta.....							
Eten.....							
Pacasmayo.....	60 cents cubic foot; \$1.20 100 pounds or 24 per cent.	\$1.20 cubic foot; \$2.40 100 pounds.	60 cents cubic foot; \$1.20 100 pounds.	36 cents cubic foot; 72 cents 100 pounds.	32 cents cubic foot; 64 cents 100 pounds.	27 cents cubic foot; 54 cents 100 pounds.	20 cents cubic foot; 40 cents 100 pounds.
Huanchico.....							
Salaverry.....							
Chimbote.....							
Samanco.....							
Casma.....							
Supa.....							
Huacho.....							
Callao.....							
Cerro Azul.....							
Tambo de Mora.....							
Pisco.....							
Lomas.....	60 cents cubic foot; \$1.20 100 pounds or 24 per cent.	\$1.20 cubic foot; \$2.40 100 pounds.	60 cents cubic foot; \$1.20 100 pounds.	35 cents cubic foot; 70 cents 100 pounds.	30 cents cubic foot; 60 cents 100 pounds.	23 cents cubic foot; 46 cents 100 pounds.	18 cents cubic foot; 36 cents 100 pounds.
Quila.....							
Mollendo.....							
Ilo.....							
Arica.....							
Paraguan.....							
Caldera Buena.....							
Iquique.....							
Tocopilla.....							
Gatico.....							
Antofagasta.....							
Talca.....							
Chinanai.....	60 cents cubic foot; \$1.20 100 pounds or 24 per cent.	\$1.20 cubic foot; \$2.40 100 pounds.	60 cents cubic foot; \$1.20 100 pounds.	30 cents cubic foot; 60 cents 100 pounds.	26 cents cubic foot; 52 cents 100 pounds.	21 cents cubic foot; 42 cents 100 pounds.	18 cents cubic foot; 36 cents 100 pounds.
Cañal.....							
Carriñal.....							
Huasco.....							
Coquimbo.....							
Valparaiso.....							
Talcahuano.....							
Tome.....							
Coronel.....							
Lota.....							

Class 4. To Buenaventura, Tumaco, Esmeraldas, Bahia, and Manta, this class includes also bricks, cement, coal, coke, salt (in bags), soda (ash, caustic, hypsulphate, and silicate). To Callao, Iquique, Antofagasta, Taltal, Coquimbo, and Valparaiso, class 4 includes also bags and bagging (jute), bricks, buckets, cement, coke (50 tons and over), corks, deals, demijohns (empty), earthenware, glass (hollow), glass bottles, lamp glasses, paper (common and packing), salt, shovels, straw envelopes, sugar (in bags or barrels), threshers, wire (barbed and black varnished).

Special rates: Flour, in bags or barrels, to all ports, 45 cents per 100 pounds. Kerosene oil, in cans, boxed, to Colombian ports and minor ports of Ecuador, 30 cents per cubic foot; to other ports, 25 cents per cubic foot.

All merchandise (except Classes D and DD, and that which is rated ad valorem) of \$1,000 and upward in value per freight ton will be rated as valuable.

Classes D and DD packages must not exceed 112 pounds each. Packages and pieces exceeding 2 tons weight each will be charged the following rates in addition to those named on pages 6 and 7 (table shown on p. 000):

Weight.	If freighted at measure- ment (per cubic foot).	If freighted at weight (per 100 pounds).
Over 2 to 3 tons.....	\$0.60	\$1.80
Over 3 to 4 tons.....	.90	3.00
Over 4 to 5 tons.....	1.20	3.60
Over 5 to 6 tons.....	1.50	5.40
Over 6 to 7 tons.....	1.80	6.00
Over 7 to 8 tons.....	2.10	7.80
Over 8 to 9 tons.....	2.40	8.40
Over 9 to 10 tons.....	2.70	9.00

Over 10 tons by special agreement.

The through rates of freight, etc., and the classification of merchandise are subject to revision without notice.

Superse
543, 547, 5

American
Steel Co.
Do...

Babbitt, B

Benjamin

Blake, M

Bonestell
son & C
Cluett, P
Dinkelsp
Dolliver &

Dunham,
H. Co.
Eastman
Elkus-Br
The
Goldstone
Holbrook
S. Co.
Ide, Geo.
Lowenbe
Meyerste
Roebling
Co.

Unless c
abscription

EXHIBIT O 22.

PANAMA RAILROAD COMPANY—PANAMA RAILROAD STEAMSHIP LINE.

Tariff of special rates to San Francisco, Cal., from points as indicated below.

[Effective August 26, 1903. For use of agents only.]

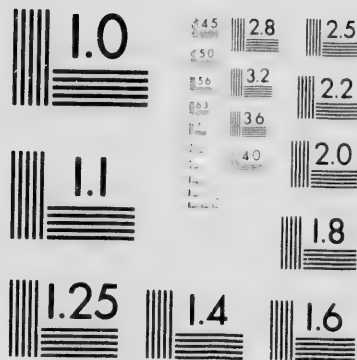
Supersedes change in rate slips Nos. B 120, 145, 353, 354, 453, 483, 486, 500, 522, 523, 524, 525, 533, 540, 543, 547, 551, 580, 584, 635, 636, 640, 642, 643, 652, 653, 662.

[Subject to cancellation on ten days' notice.]

For—	Articles.	Rate.	From—
American Wire and Steel Company.	Wire, iron, plain or barbed...	C. L. 15 cents per 100 pounds	New York.
Do.	Wire, insulated, broom and binding, hay and shingle bands, wire springs, coppered or tinned, wire rope and cable (no piece over 4,000 pounds).	C. L. 50 cents per 100 pounds	Do.
Babbitt, B. T.	Soap, common soap powder, and condensed lye.	C. L. 45 cents per 100 pounds	Do.
Benjamin, Geo. P.	General merchandise	A. Q. C. L. rates.	New York and com. points.
Blake, Moffit & Towne.	Flat paper and cardboard.	A. Q. 75 cents per 100 pounds	New York and com. points abs. 15 cents per 100 pounds.
Bonestell, Richard-son & Co.	Book paper, N. S. C.	A. Q. 60 cents per 100 pounds	New York and com. points.
Cliett, Peabody & Co.	Collars, cuffs, and shirts.	\$1.30 per 100 pounds.	New York.
Dinkelspell, L. & Sons.	Dry goods	40 per cent off rail.	Do.
Dolliver & Bro.	General merchandise	A. Q. C. L. rate.	New York and com. points.
Dunham, Carrigan & H. Co.	do	do	Do.
Eastman Kodak Co.	Kodaks and photo supplies.	\$1.80 per 100 pounds.	New York.
Elkus-Brenner Co.	Dry goods	40 per cent off rail.	Do.
The Goldstone Bros.	do	do	Do.
Holbrook, Merrill & S. Co.	Stamped wire, nested	A. Q. C. L. rate.	Do.
Ide, Geo. P.	Collars, cuffs, and shirts.	\$1.30 per 100 pounds.	Do.
Lowenberg & Co.	Dry goods	40 per cent off rail.	Do.
Meyerstein Co., The	do	do	Do.
Roebbing's, J. A., Sons' Co.	Wire. (See American Wire and Steel Co.)	Same as American Wire and Steel Co.	Do.

Unless otherwise noted, rates applying from New York and com. points will be subject to usual absorption of 20 cents per 100 pounds.

END OF



PHOTOGRAPHIC SCIENCES CORPORATION
770 BASKET ROAD
P.O. BOX 338
WEBSTER, NEW YORK 14580
(716) 265-1600



OF TEXT

20:1

CompuLink Information Service, Inc.
Washington, D.C.

CIS



Statement of tonnag

San Francisco.		Steamer.	Voyage.	San Francisco.		Mazatlan.		San Blas.	
Date sailed.	Date arrived.			L.	D.	L.	D.	L.	D.
1903.	1903.								
May 3	June 26	Peru	17 O	1,279					
		Peru	17 H		1,887			1	23
May 9	July 3	San Juan	89 O	865				5	24
		San Juan	89 H		1,064				
May 16	July 10	Colon	50 O	1,578					
		Colon	50 H		1,392		67	60	3
May 21	June 8	Barracouta	82 C A		In coffee service; ship sailed northbound				
		Barracouta	82 C A						
May 26	July 14	City Sydney	71 O	1,335					
		City Sydney	71 H		946				
Total month of May				5,057	5,289		67	66	50
June 2	July 22	Newport	30 O	1,457					
		Newport	30 H		1,378				
June 6	July 28	City Para	33 O	776				6	22
		City Para	33 H		928		25		
June 13	August 6	San Jose	99 O	1,219					
		San Jose	99 H		992	38	28	37	4
June 20	August 12	City Panama	46 O	652					
		City Panama	46 H		877				
June 27	August 20	Acapulco	92 O	1,229					
		Acapulco	92 H		1,123				
Total, month of June				5,333	5,298	38	53	63	26
July 3	August 27	Peru	18 O	1,120				39	19
		Peru	18 H		909	18	75		
July 11	September 2	San Juan	90 O	1,236					
		San Juan	90 H		923	1	9	13	2
July 18	September 10	Colon	51 O	990		148	33		
		Colon	51 H		1,047	5	33		
July 25	September 16	City Sydney	72 O	1,421					
		City Sydney	72 H		919				
Total, month of July				4,767	3,798	172	150	52	21
				San Francisco.		Mazatlan.		San Blas.	
				L.	D.	L.	D.	L.	D.
1903.	1903.								
August 1	September 23	Newport	31 D	1,146			18		3
		Newport	31 U		1,260	208	6		
August 8	September 29	City of Para	34 D	1,240					
		City of Para	34 U		1,320	5	13	27	5
August 15	October 8	San Jose	100 D	1,465		49	68		
		San Jose	100 U		952	14	14		
August 22	October 16	Barracouta	10 D	1,410					
		Barracouta	10 U		1,227				
August 29	October 21	Acapulco	93 D	1,250					
		Acapulco	93 U		594	55	196		
Total, month of August				6,501	5,353	331	315	27	8
September 5	October 28	Peru	19 D	1,542					
		Peru	19 U		927		26	36	17
September 12	November 24	San Juan	91 D	1,373					
		San Juan	91 U		859		36		
September 19	November 13	Colon	50 D	1,474					
		Colon	50 U		758				
September 26	November 19	City of Sydney	73 D	1,360		185	126	19	19
		City of Sydney	73 U		856	24	132		
Total month of September				5,749	3,400	326	320	81	36
October 3	November 25	Newport	32 D	1,606					
		Newport	32 U		702	3	107	41	34
October 10	December 2	City of Para	35 D	1,247		18	27		
		City of Para	35 U		718	10	42		
October 17	December 10	San Jose	101 D	1,476			47		
		San Jose	101 U		688				
October 24	December 16	Barracouta	11 D	1,651			23	9	41
		Barracouta	11 U		733	10	73		
October 31	December 23	Acapulco	94 D	1,723					
		Acapulco	94 U		633	10	38	24	28
Total month of October				7,703	3,474	51	367	74	103
				San Francisco.		San Blas.		Mazatlan.	

[L. = Loaded, D. = Discharged.]

San Juan del	Corinto	Amatula	La Unión	La Libertad.	Acatulá.	San José de	Chamberico.	Ocos.	Acapuleo.	San Juanillo.
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Santa Arenas.		Salina Cruz.		San Benito.		Panama.		Total.	
L.	D.	L.	D.	L.	D.	L.	D.	L.	D.
19			75			1,604	1,534	2,371	2,371
								2,130	2,130
4	11						1,064	1,337	1,337
41	46					1,059		1,470	1,470
123	63						1,614	2,130	2,130
						1,321		1,898	1,898
							1,845	1,845	1,845
							1,390	1,709	1,709
10	50					1,706		1,948	1,948
197	170		75			5,690	7,447	16,838	16,838
29	173						1,130	2,072	2,072
						1,438		1,601	1,601
							1,880	2,130	2,130
42	131					1,991		2,329	2,329
3	19						1,292	1,921	1,921
						1,246		1,454	1,454
5	4						651	877	877
35	108					1,036		1,181	1,181
							1,118	1,650	1,650
						1,392		1,606	1,606
115	500					7,103	6,071	16,821	16,821
							1,123	1,476	1,476
	97					1,893		2,459	2,459
45	122						808	1,652	1,652
9	34					1,132		1,192	1,192
							1,084	1,369	1,369
88	30					1,384		1,873	1,873
42	107						1,205	1,890	1,890
						1,276		1,593	1,593
184	390					5,685	4,220	13,504	13,504

Santa Arenas.		Panama.		Salina Cruz.		San Benito.		Total.	
L.	D.	L.	D.	L.	D.	L.	D.	L.	D.
			899					1,301	1,301
	98	1,521						2,031	2,031
52	79		1,067					1,552	1,552
	10	1,166						1,665	1,665
			613					1,713	1,713
	16	1,197						1,503	1,503
81	115		1,300					1,812	1,812
		1,434						1,668	1,668
			1,292					1,495	1,495
4	96	1,784						1,952	1,952
137	414	7,102	5,171					16,692	16,692
27	107		1,168					1,884	1,884
8	65	1,282						1,404	1,404
			801					1,457	1,457
	15	1,447						1,593	1,593
11	56		1,320					1,797	1,797
		1,450						1,618	1,618
			1,196					1,726	1,726
	76	1,873						2,050	2,050
46	319	6,052	4,485					13,529	13,529
27	62		1,241					1,854	1,854
	15	1,244						1,358	1,358
			817					1,422	1,422
10	58	1,792						2,055	2,055
8	97		995					1,800	1,800
		1,073				21		1,242	1,242
			1,247					1,772	1,772
5	40	1,613						1,865	1,865
21	60		1,423					2,121	2,121
	38	1,187						1,263	1,263
71	370	6,909	5,723			21		16,752	16,752

Santa Arenas.		Salina Cruz.		San Benito.		Panama.		Total.	
L.	D.	L.	D.	L.	D.	L.	D.	L.	D.

Panama Railroad Company-

EXHIBIT

Exhibits of miscellaneous

EXHIBIT C

Taking effect February 1, 1905—

NOTE.—A charge of 10 cents (silver) additional will be collected from passengers

tariff of local fares.

freight tariffs.

ly whole and half fares.

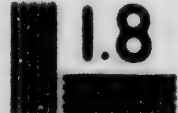
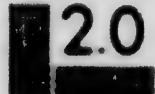
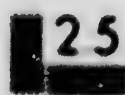
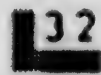
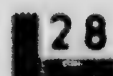
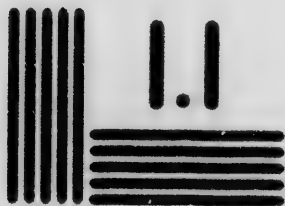
without tickets on trains from stations where there are ticket offices.

Lion Hill.

										First class.		Seco clas			
										Gold.	silver.	silver.			
										.10	.20				
										First class.		Second class.	First class.	Seco clas	
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.15	.25	.50	
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas
										Gold.	Silver.	Silver.	Gold.	Silver.	silver.
										.15	.30	.20	.30	.60	.35
										First class.		Second class.	First class.		Seco clas

												Stations.	Miles.								
												Colon.	0								
												First class.	Second class.								
												Mount Hope.	Gold. Silver. Silver.	Mount Hope.	2						
												.10	.20	.10							
												First class.	Second class.	First class.	Second class.						
												Mindi.	Gold. Silver. Silver.	Gold. Silver. Silver.	Mindi.	4					
												.15	.30	.15	.25	.50	.25				
												First class.	Second class.	First class.	Second class.	First class.	Second class.				
Gatun.												Gold. Silver. Silver.	Gold. Silver. Silver.	Gold. Silver. Silver.	Gatun.	7					
												.15	.30	.15	.25	.50	.30	.35	.70	.40	
First class.			Second class.			First class.			Second class.			First class.			Second class.						
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.							
.20	.40	.20	.30	.60	.35	.45	.90	.50	.55	1.10	.65				Lion Hill.	10					
First class.			Second class.			First class.			Second class.			First class.			Second class.						
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.							
.30	.60	.35	.40	.80	.50	.55	1.10	.65	.65	1.30	.75				Ahorea Legarto.	12					
First class.			Second class.			First class.			Second class.			First class.			Second class.						
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.							
.45	.90	.50	.55	1.10	.65	.70	1.40	.80	.80	1.60	.95				Bohio.	15					
First class.			Second class.			First class.			Second class.			First class.			Second class.						
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.							
.60	1.20	.70	.70	1.40	.85	.85	1.70	1.00	.95	1.90	1.10				Frijoles.	18					
First class.			Second class.			First class.			Second class.			First class.			Second class.						
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.							
.75	1.50	.85	.85	1.70	1.00	1.00	2.00	1.15	1.10	2.20	1.30				Tabernilla.	21					

END



October 10.	December 2.	City of Para	35 U	1,247	718	18	42														
October 17.	December 10.	San Jose	101 D	1,476		10	47														
October 24.		San Jose	101 U		688																
	December 16.	Barracouta	11 D	1,651			23	9	41												
October 31.		Barracouta	11 U		733	10	73														
	December 23.	Acapulco	94 D	1,723																	
		Acapulco	94 U		633	10	38	24	28												
Total month of October.				7,703	3,474	51	367	74	103												
				<table><tr><th colspan="2">San Francisco.</th><th colspan="2">San Blas.</th><th colspan="2">Mazatlan.</th></tr><tr><th>L.</th><th>D.</th><th>L.</th><th>D.</th><th>L.</th><th>D.</th></tr></table>						San Francisco.		San Blas.		Mazatlan.		L.	D.	L.	D.	L.	D.
San Francisco.		San Blas.		Mazatlan.																	
L.	D.	L.	D.	L.	D.																
1903.	1903.																				
November 1.	December 31.	Peru, outward.	20	1,858				183													
	1904.	Peru, inward.	20		706			7	18												
November 14.	January 9.	San Juan, outward.	92	1,611					53												
November 21.	January 9.	San Juan, inward.	92		1,102	82	18														
November 21.	January 14.	Colon, outward.	53	1,620		2	14	1	110												
November 28.	January 14.	Colon, inward.	53		719			21	65												
	January 14.	City of Sydney, outward.	74	1,403																	
	January 14.	City of Sydney, inward.	74		958	7	18	7	67												
Total month of November.				6,502	3,485	91	50	36	496												
December 5.	January 26.	Newport, outward.	33	709					8												
December 12.	January 26.	Newport, inward.	33		1,105			19	40												
December 12.	February 4.	City of Para, outward.	36	1,112					9												
December 19.	February 4.	City of Para, inward.	36		1,084	26															
December 19.	February 11.	San Jose, outward.	102	1,273		10	23		34												
December 19.	February 11.	San Jose, inward.	102		1,251			10	22												
December 19.	February 11.	Barracouta, downward.	12	645																	
Total month of December.				3,759	3,440	36	23	29	113												
1904.																					
January 2.	February 25.	Acapulco, outward.	95	998				2	104												
	February 25.	Acapulco, inward.	95		948			14	54												
January 9.	March 4.	Peru, outward.	21	1,251				10	28												
January 16.	March 4.	Peru, inward.	21		1,294	109															
January 16.	March 12.	San Juan, outward.	93	1,366		6	18		58												
January 23.	March 12.	San Juan, inward.	93		1,105			13	55												
January 23.	March 17.	Colon, outward.	54	1,643																	
January 23 ^b .	March 17.	Colon, inward.	54		1,185	22	25	23	43												
January 23 ^b .	February 24.	Barracouta, upward.	83 C A																		
January 30.	February 24.	Barracouta, downward.	83 C A																		
January 30.	March 22.	City of Sydney, outward.	75	1,174				15	128												
January 30.	March 22.	City of Sydney, inward.	75		1,106																
Total month of January.				6,432	5,638	137	43	77	470												
February 6.	April 1.	Newport.	34 O	1,103																	
February 13.	April 1.	Newport.	34 H		1,683	104		13	55												
February 13.	April 11.	City of Para.	37 O	937		3	8		10												
February 10 ^c .	April 11.	City of Para.	37 H		1,582			24	38												
February 10 ^c .	March 28 ^c .	Aztec.	6 C A																		
February 16 ^c .	March 28 ^c .	Aztec.	6 C A																		
February 16 ^c .	March 3 ^c .	City of Pekin.	1 C A																		
February 20 ^c .	March 3 ^c .	City of Pekin.	1 C A																		
February 20 ^c .	March 16 ^c .	Barracouta.	84 C A																		
February 20.	March 16 ^c .	Barracouta.	84 C A																		
February 20.	April 13.	San Jose.	103 O	1,642																	
February 27.	April 13.	San Jose.	103 H		1,000	11		25	99												
February 27.	April 22.	City of Panama.	48 O	885					63												
February 27.	April 22.	City of Panama.	48 H		783			20	9												
Total, month of February.				4,567	5,048	118	8	82	274												
March 5.	May 4.	Acapulco.	96 O	1,877					30												
March 8 (c).	May 4.	Acapulco.	96 H		988	46															
March 8 (c).	April 17 ^c .	Pekin.	2 C A																		
March 12.	April 17 ^c .	Pekin.	2 C A																		
March 12.	May 16.	Peru.	22 O	1,404		37	5		85												
March 19.	May 16.	Peru.	22 H		1,874	37	23	72	85												
March 19.	May 18.	San Juan.	94 O	1,542																	
March 20 ^c .	May 18.	San Juan.	94 H		1,453																
March 20 ^c .	April 23 ^c .	Barracouta.	85 C A																		
March 20 ^c .	April 23 ^c .	Barracouta.	85 C A																		
Total, month of March.				4,823	4,315	120	28	72	200												
				<table><tr><th colspan="2">San Francisco.</th><th colspan="2">Mazatlan.</th><th colspan="2">San Blas.</th></tr><tr><th>L.</th><th>D.</th><th>L.</th><th>D.</th><th>L.</th><th>D.</th></tr></table>						San Francisco.		Mazatlan.		San Blas.		L.	D.	L.	D.	L.	D.
San Francisco.		Mazatlan.		San Blas.																	
L.	D.	L.	D.	L.	D.																
April 2.	May 27.	City of Sidney.	76 O	1,357			15														
April 9.	May 27.	City of Sidney.	76 H		2,032			37	55												
April 9.	June 1.	Newport.	35 O	1,122			32	3	55												
April 16.	June 1.	Newport.	35 H		1,621	16	194														
April 16.	June 10.	City of Para.	38 O	1,675																	
April 23.	June 10.	City of Para.	38 H		1,967	12	45	15	30												
April 23.	June 18.	San Jose.	104 O	1,360		48	22														
April 30.	June 18.	San Jose.	104 H		1,576	2	47														
April 30.	June 26.	City of Panama.	49 O	1,116		2	70														
April 30.	June 26.	City of Panama.	49 H		938			109													
Total month of April.				6,630	8,134	80	425	164	140												

^aSpecial service. Date of departure is from Panama.

05	32	147	27					64	216	46	116	1	4	3	159	19	205	116	427	5	22	
1	4	36	5		27	9	53	125	197	68	175	2	119	2	41	78	10	71	74	175	1	67
1	3	2	85	15	26	13	33	87	252	12	149		37					69	98	3	20	
		20	12	23		95	57	23	176	45	186		93	18	114	13	153	6	68			
		2	20	2		6	72	112	165	148	126		54	11	8	137	12	85	23	228		
	27	2	8				97	1	172	14	192							35	22		30	
11	118	214	345			149	470	430	1,659	523	1,519		87	278	87	540	66	559	347	1,083	9	144
Panzanillo.		Acapulco.		Ocos.		Champerico.		San Jose de Guatemala.		Acajutla.		La Libertad.		La Union.		Amapala.		Corinto.		San Juan del Sur.		
	D.	L.	D.	L.	D.	L.	D.	L.	D.	L.	D.	L.	D.	L.	D.	L.	D.	L.	D.	L.	D.	
27	36	30	53					129	325	83	112	15	10			145	24	224	45	307	2	34
						44		31	191	36	199											
			13			62	100	138	148	102	209	5	31	53		81	12	51	12	125		
4	5	29	21			105	157	36	92	20	76			39					19	82		28
4	8	15	26			140	65	279	206										16	17	18	
		35	20			68	49	39	159		134	4	67	47		107	14	113	52	380		
		59	8			117	29	290	207	114	190	120	80	30		95	10	79	26	126		
	29	27	36			56			175	52	171										11	27
35	78	208	196			566	456	942	1,503	407	1,091	154	320	148		428	60	465	170	1,067	31	89
5	15	44	8			159		108	104	47	39		1									2
		47	18			94		112	64	62	62	32	90	56		84	1	198	3	282		
			76			95	20	437	124	450	82	198	24	76		77	8	87	23	93		
2	21	25				82	260	62	346	140	241	3	175						10	333		34
6	236	28	40			107	21	432	79											29	2	13
		21	27			137		97	34	75	33	38	14	143		164	28	102	45	155		
			1			199	3	204	63	229	156	151	31	64		59	36	61	77	93		
13	272	165	170			873	304	1,452	814	1,003	613	422	335	339	384	73	448	158	995		2	49
4	25	131	10					135	129		99	476	70								4	
		35				96		98	87	31	304	84	127	41		52	13	100	9	365		
		20	2			167	121	181	143	32	118	350	33	351		73	14	46	219	154		
9	2	27	33			134	43	14	1	203	233	4	141						12	452		38
27	12	106	30			37		365											222	70	1	
		24	18			148	14	93	93	86	32	8	24	30		117	18	123	15	127		
4	3	33	33			91	61		325	377	182	281	19	151		58	24	49	107	210		21
		41	38			81	42		173													
								113														
						400		259		350				200								
10	20	20	51					370	183	587	121	359	34								4	12
		34	14					35	111	39	234	26	172	35		82	52	161		322		
54	62	471	279			1,117	348	1,412	1,723	1,705	1,323	1,588	630	808		382	122	479	584	1,700	9	71
		134	6																			
1		40				177	47	60	238	58	146	106	124		1	70	30	47	188	114		
	8		4				28		164	730	92	379										37
		54	41			118	53	48	132	85	107	17	35			46	13	89	15	473	1	12
									294													
								1,514		1,290	33	401							598			
ro.										1,146		234			358				454			
							109															
						1,136			471													
			6				125	38	191	254	49	76	98	87		101	19	32	170	168		
3	24	21				50	51	166													18	53
5	32	157	17				9	82	240	135	47	23										23
		49	65				102	124	235	223	19	120	46		166	26	123	15	241			
9	64	455	139				1,431	454	1,832	1,634	4,768	828	1,412	442	816	383	88	321	1,440	1,097	19	125
		1	15				85	62	3	348	188	56	78	52	402	105	50	82	81	117		
4		40				234	5	190	5	200		96						22		4	8	
ro.								1,739											590			
								14	93										167	150	21	11
8	60	4	34			159	96	116	329	186	18	48		108								
2	53	103	34			58	46	116	171	67	158	106	63		108	82	56	225	83	4	18	43
			17				33		171						317	132	32	48	91	103		
		24				133	52	70	187	175		26			47	95	40	122	22	106		
ro.																						
						425				1,249												
4	113	172	100			1,094	294	2,132	1,133	2,065	232	583	115	874	414	178	477	1,056	480	43	62	
Panzanillo.		Acapulco.		Ocos.		Champerico.		San Jose de Guatemala.		Acajutla.		La Libertad.		La Union.		Amapala.		Corinto.		San Juan del Sur.		
	D.	L.	D.	L.	D.	L.	D.	L.	D.	L.	D.	L.	D.	L.	D.	L.	D.	L.	D.	L.	D.	
		50	4			217	44	46	184	300	47	210	5	351	209	13	5	4	101			
0	47	110	28			52	348	140	87	183	16	44						77	200		20	
6	64	98	19			153	73	1	76	110								142	82	6	14	
		36	4			74		73	36	119	34	25		49	118	41	151	49	26			
			53			434	47	5	73	564	123	157	45	223	71	51	114	205	213			
6	32	62	41			212	55	146	81	419	30									50	24	
1	16	114	36						147	149	174	105	6						93		64	
		39							84	192	275	94	79		34	23	86	70	136			
		65	69				32	2	32	86	96	25	9	103	85	5	61	105	46			
9	13	59	20				135	184	333	111	255	5	132					96	154		20	
5	172	633	274			1,090	438	889	1,294	2,220	1,124	637	320	726	517	135	507	841	958	56	142	

^b Special steamer on coffee service. Date of departure is from Panama.

^c Special service. Date of departure is from Panama.

10	58	1,792	817					1,422	1,422
8	97		995					2,055	2,055
		1,073						1,800	1,800
			1,247					1,242	1,242
5	40	1,618						1,772	1,772
21	69		1,423					1,865	1,865
	38	1,187						2,121	2,121
								1,263	1,263
71	370	6,909	5,723			21		16,752	16,752
ata Arenas.		Salina Cruz.		San Benito.		Panama.		Total.	
	D.	L.	D.	L.	D.	L.	D.	L.	D.
11	29					1,361		2,114	2,114
						1,654		1,910	1,910
19	137						1,060	2,027	2,027
						1,325		1,620	1,620
							1,629	2,105	2,105
20	30					1,543		1,843	1,843
62	68						1,379	2,261	2,261
	47					1,480		1,584	1,584
1112	311					6,002	5,429	15,464	15,464
				354			1,269	1,446	1,446
	24					1,541		1,967	1,967
24	135						1,696	2,423	2,423
						2,149		2,499	2,499
							2,583	1,858	1,858
4	110					1,314		1,912	1,912
258	49						1,342	1,863	1,863
286	318								
				354		5,004	5,690	13,968	13,968
				180			1,493	1,930	1,930
7	65					1,674		2,102	2,102
268	225						1,920	2,863	2,863
						1,648		2,287	2,287
							1,138	1,728	1,728
72	151					1,392		1,899	1,899
235	199						1,806	2,942	2,942
23	38					1,374		1,568	1,568
						113		113	113
							1,209	1,209	1,209
							1,990	2,539	2,539
						1,980		2,202	2,202
305	678					8,181	9,556	23,382	23,382
							1,453	2,088	2,088
130	28					1,791		2,418	2,418
68	88						1,875	2,302	2,302
145	37					2,042		2,633	2,633
						294		294	294
							3,770	3,803	3,803
							2,192	2,192	2,192
						109		109	109
							1,607	1,607	1,607
23	29						1,580	2,409	2,409
25	13					1,251		1,405	1,405
							978	1,353	1,353
	18					1,460		1,872	1,872
191	213					6,947	13,455	24,485	24,485
72	97						1,874	2,837	2,837
54						17		1,007	1,007
							2,329	2,329	2,329
							1,459	1,993	1,993
35	297					2,191		3,113	3,113
86	218						1,298	2,241	2,241
	21					1,499		2,036	2,036
							1,674	1,674	1,674
47	633					3,707	8,634	17,230	17,230
ata Arenas.		Salina Cruz.		San Benito.		Panama.		Total.	
	D.	L.	D.	L.	D.	L.	D.	L.	D.
16	57						1,803	2,564	2,564
						2,116		2,801	2,801
							1,246	1,661	1,661
14	123					1,811		2,307	2,307
31	126						2,480	3,345	3,345
90	55					1,368		2,380	2,380
							1,417	1,882	1,882
7	17					1,735		2,329	2,329
7	190						826	1,516	1,516
						1,434		2,000	2,000
65	568					8,464	7,772	22,785	22,785

Departure is from Panama.



First

Pedro Miguel.

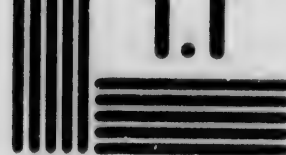
Gold.

Mamei

[illegible]

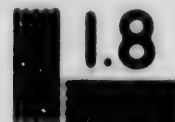
[illegible]

.60	1.20	.70	.70	1.40	.85	.85	1.70	1.00	.95	1.90	1.10		
First class.		Second class.		First class.		Second class.		First class.		Second class.			
Gold	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Tabernilla.	21
.75	1.50	.85	.85	1.70	1.00	1.00	2.00	1.15	1.10	2.20	1.30		
First class.		Second class.		First class.		Second class.		First class.		Second class.			
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	San Pablo.	23
.85	1.70	1.00	.95	1.90	1.15	1.10	2.20	1.30	1.20	2.40	1.40		
First class.		Second class.		First class.		Second class.		First class.		Second class.			
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Bailamonos.	24
.90	1.80	1.05	1.00	2.00	1.20	1.15	2.30	1.35	1.25	2.50	1.45		
First class.		Second class.		First class.		Second class.		First class.		Second class.			
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Mamei.	26
.95	1.90	1.15	1.10	2.20	1.30	1.20	2.40	1.45	1.30	2.60	1.55		
First class.		Second class.		First class.		Second class.		First class.		Second class.			
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gorgona.	28
1.10	2.20	1.30	1.20	2.40	1.45	1.35	2.70	1.60	1.45	2.90	1.70		
First class.		Second class.		First class.		Second class.		First class.		Second class.			
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Matachin.	30
1.15	2.30	1.40	1.30	2.60	1.55	1.40	2.80	1.70	1.50	3.00	1.80		
First class.		Second class.		First class.		Second class.		First class.		Second class.			
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Bas Obispo.	31
1.20	2.40	1.45	1.35	2.70	1.60	1.45	2.90	1.75	1.55	3.10	1.85		
First class.		Second class.		First class.		Second class.		First class.		Second class.			
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Las Cascadas.	33
1.30	2.60	1.55	1.45	2.90	1.70	1.55	3.10	1.85	1.65	3.30	2.00		
First class.		Second class.		First class.		Second class.		First class.		Second class.			
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Empire.	35
1.40	2.80	1.70	1.55	3.10	1.85	1.65	3.30	2.00	1.75	3.50	2.10		
First class.		Second class.		First class.		Second class.		First class.		Second class.			
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Culebra.	36
1.50	3.00	1.75	1.60	3.20	1.90	1.75	3.50	2.05	1.85	3.70	2.20		
First class.		Second class.		First class.		Second class.		First class.		Second class.			
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Paraiso.	39
1.65	3.30	1.95	1.75	3.50	2.10	1.90	3.80	2.25	2.00	4.00	2.35		
First class.		Second class.		First class.		Second class.		First class.		Second class.			



1.1

1.1



1.8



1.25



1.4



1.6

PHOTOGRAPHIC SCIENCES CORPORATION
770 BASKET ROAD
P O BOX 338
WEBSTER, NEW YORK 14580
(716) 265-1600



April 23.....	June 10.....	City of Para.....	38 H	1,967	12	45	15	30
April 30.....	June 18.....	San Jose.....	104 O	1,360	48	22		
		San Jose.....	104 H	1,576	2	47		
	June 26.....	City of Panama.....	49 O	1,116	2	70		
		City of Panama.....	49 H	938			109	
Total month of April				6,630	8,134	80	425	164
							140	

a Special service. Date of departure is from Panama.

Pacific Mail Steamship Company—Recapitulation—

Agencies.					
	May.		June.		I
	L.	D.	L.	D.	
San Francisco.....	5,057	5,289	5,333	5,298	4
Mazatlan.....		67	38	53	
San Blas.....	66	60	63	26	
Manzanillo.....	36	108	346	124	
Acapulco.....	290	62	250	120	
Salina Cruz.....		75			
San Benito.....					
Ocos.....	109	25			
Champerico.....	767	611	824	645	
San Jose de Guatemala.....	966	890	790	1,000	
Acajutla.....	1,057	646	444	1,591	
La Libertad.....	91	202	94	142	
La Union.....	405	331	28	176	
Amapala.....	186	569	91	262	
Corino.....	1,914	207	1,268	784	
San Juan del Sur.....	7	89	34	29	
Puntarenas.....	197	170	115	500	
Panama.....	5,690	7,447	7,103	6,071	5
Total.....	16,838	16,838	16,821	16,821	13

SAN FRANCISCO, March 28, 1905.

S. Doc. 429, 59-1. (To face p. 336.)

	32	62	35		434	47	5	73	364	123	157	45	223	71	51	114	203	213	50	24
	16	114	36		212	55	146	81	419	30	105	6	2	34	23	86	93	70	136	64
		39						117	149	174	79			85	5	61	105	46		
		65	69			32	2	32	86	96	25	9	103				96	154	20	
	13	59	20			135	184	333	111	255	5	132								
5	172	633	274		1,090	438	889	1,294	2,220	1,124	637	320	726	517	135	507	841	958	56	142

^b Special steamer on coffee service. Date of departure is from Panama.

^c Special service. Date of

Statement of tonnage handled on Panama Line during fiscal year commencing May 1, 1903, and ending

1903.												1904.							
July.	August.		September.		October.		November.		December.			January.		February.		March.			
D.	L.	D.	L.	D.	L.	D.	L.	D.	L.	D.		L.	D.	L.	D.	L.	D.		
3,798	6,501	5,353	5,749	3,400	7,703	3,471	6,502	3,485	3,759	3,440		6,432	5,638	4,567	5,048	4,823	4,315		
150	331	315	326	320	51	367	36	496	29	113		77	470	82	274	72	200		
21	27	8	81	36	74	103	91	50	36	23		137	43	118	8	120	28		
93	63	138	24	69	11	118	35	78	13	272		54	62	19	64	14	113		
187	260	315	229	118	214	345	208	196	165	170		471	279	455	139	172	100		
					21				354			180							
362	320	165	260	152	149	479	566	456	875	304		1,117	348	1,431	451	1,094	294		
1,077	234	1,439	92	1,427	430	1,659	942	1,503	1,452	814		1,312	1,723	1,832	1,634	2,132	1,133		
1,435	233	1,143	208	1,233	523	1,519	407	1,091	1,003	613		1,705	1,323	4,768	828	2,065	232		
167	33	147	68	189	87	278	154	320	422	335		1,588	630	1,412	442	533	115		
248	21	285	34	443	87	540	148	428	339	384		808	382	816	383	874	414		
556	96	494	92	384	66	559	60	465	73	448		122	479	88	321	178	477		
759	1,274	1,224	256	863	347	1,083	170	1,067	158	995		584	1,700	1,440	1,097	1,056	480		
41	60	81	12	91	9	144	31	89	2	49		9	71	19	125	43	62		
390	137	414	46	319	71	379	112	311	286	318		605	678	491	213	347	633		
4,220	7,102	5,171	6,062	4,485	6,909	5,723	6,002	5,429	5,004	5,690		8,181	9,556	6,947	13,455	3,707	8,634		
13,504	16,692	16,692	13,529	13,529	16,752	16,752	15,464	15,464	13,968	13,968		23,382	23,382	24,485	24,485	17,230	17,230		

Correct:

125					2,480	3,345	3,345
90	55			1,368		2,380	2,380
					1,417	1,882	1,882
7	17			1,735		2,329	2,329
7	190				826	1,516	1,516
				1,434		2,000	2,000
55	568			8,464	7,772	22,785	22,785

Departure is from Panama.

ing April 30, 1904.

April.		Total.	
	D.	L.	D.
630	8,134	67,823	56,672
80	425	1,274	3,250
164	140	1,029	536
55	172	688	1,411
333	274	3,570	2,305
			75
		555	
		109	25
090	438	8,958	4,699
889	1,294	11,472	15,593
220	1,124	15,061	12,778
637	820	5,156	3,287
726	517	4,316	4,538
135	507	1,245	5,521
841	958	10,209	11,217
56	142	363	1,013
165	568	2,756	4,884
404	7,772	76,846	83,653
785	22,785	211,450	211,450

E. A. CARLTON, Auditor.

180.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.
	.15	.30	.20	.25	.50	.25	.35	.70	.40	.45	.90	.50	.50	1.00	.55	.55	1.10	.65	.70	1.40
Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.	
er. Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.
0 .10	.20	.40	.25	.30	.60	.35	.40	.80	.50	.50	1.00	.60	.55	1.10	.65	.60	1.20	.75	.75	1.50
Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.	
er. Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.
0 .15	.30	.60	.35	.35	.70	.40	.45	.90	.55	.55	1.10	.65	.60	1.20	.70	.70	1.40	.80	.80	1.60
Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.	
er. Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.
0 .25	.35	.70	.40	.45	.90	.50	.55	1.10	.65	.65	1.30	.75	.70	1.40	.80	.75	1.50	.90	.90	1.80
Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.	
er. Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.
0 .30	.40	.80	.50	.50	1.00	.55	.60	1.20	.70	.70	1.40	.80	.75	1.50	.85	.80	1.60	.95	.95	1.90
Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.	
er. Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.
0 .50	.55	1.10	.65	.65	1.30	.75	.75	1.50	.85	.85	1.70	1.00	.90	1.80	1.05	.95	1.90	1.15	1.10	2.20
Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.	
er. Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.
0 .65	.70	1.40	.80	.75	1.50	.90	.85	1.70	1.00	.95	1.90	1.15	1.00	2.00	1.20	1.10	2.20	1.30	1.20	2.40

First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	Paraiso.	394
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.		
1.65	3.30	1.95	1.75	3.50	2.10	1.90	3.80	2.25	2.00	4.00	2.35		
First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	Pedro Miguel.	404
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.		
1.70	3.40	2.05	1.80	3.60	2.20	1.95	3.90	2.35	2.05	4.10	2.45		
First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	Miraflores.	42
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.		
1.75	3.50	2.10	1.90	3.80	2.25	2.00	4.00	2.40	2.10	4.20	2.50		
First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	Rio Grande.	434
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.		
1.85	3.70	2.20	1.95	3.90	2.35	2.10	4.20	2.50	2.20	4.40	2.60		
First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	Corozal.	444
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.		
1.90	3.80	2.25	2.00	4.00	2.40	2.15	4.30	2.55	2.25	4.50	2.65		
First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	Panama.	474
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.		
2.05	4.10	2.45	2.15	4.30	2.60	2.30	4.60	2.75	2.40	4.80	2.85		
First class.		Second class.	First class.		Second class.	First class.		Second class.	First class.		Second class.	La Boca.	50
Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.	Gold.	Silver.	Silver.		
2.15	4.30	2.60	2.30	4.60	2.75	2.40	4.80	2.90	2.50	5.00	3.00		

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